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A review of the family Gnaphosidae in the fauna of the Urals (Aranei), 6. Taxonomic remarks and new records, with description of a new species

Обзор семейства Gnaphosidae фауны Урала (Aranei), 6. Таксономические заметки и новые находки, с описанием нового вида

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KEY WORDS: Araneae, new combinations, new synonyms, redescription, spider, the steppe Cis-Urals.

КЛЮЧЕВЫЕ СЛОВА: Araneae, новые комбинации, новые синонимы, степное Приуралье, пауки, переописание.

ABSTRACT. New taxonomic and faunistic data on the ground spiders of the family Gnaphosidae from the Cis-Ural steppe zone are presented based on extensive fieldwork conducted in the last decade. One species, *Civizelotes aituar* sp.n. (♂), is described as new. Taxonomic problems and distribution of 11 species are discussed: *Civizelotes pygmaeus* (Miller, 1943), *Drassodes chybyndensis* Esyunin et Tuneva, 2002, *D. longispinus* Marusik et Logunov, 1995, *D. lutescens* (C.L. Koch, 1839), *D. platnicki* Song, Zhu et Zhang, 2004, *Drassyllus sur* Tuneva et Esyunin, 2003, *Gnaphosa lucifuga* (Walckenaer, 1802), *G. pilosa* Saveljeva, 1972, *Trachyzelotes manytchensis* Ponomarev et Tsvetkov, 2006, *Urozelotes trifidus* Tuneva, 2003 and *Zelotes rufi* Efimik, 1997. All the studied species are diagnosed and illustrated. Two species names are synonymized: *Drassodes natali* Esyunin et Tuneva, 2002 syn.n. with *D. platnicki* Song, Zhu et Zhang, 2004 (the replacement name for *D. lesserti* Schenkel, 1936); and *Zelotes fallax* Tuneva et Esyunin, 2003 syn.n. with *Z. rufi* Efimik, 1997. Six species — *Gnaphosa mandschurica* Schenkel, 1963, *Haplodrassus bohemicus* Miller et Buchar, 1977, *H. orientalis* (L. Koch, 1866), *Micaria bosmansi* Kovblyuk et Nadolny, 2008, *Parasyrisca arrabonica* Szinetár et Eichardt, 2009 and *Talanites mikhailovi* Platnick et Ovtsharenko, 1991 — are reported from Orenburg Area for the first time; one previously recorded species — *Gnaphosa betpaki* Ovtsharenko, Platnick et Song, 1992 — is excluded from the regional list.

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РЕЗЮМЕ. Представлены новые таксономические и фаунистические данные о наземных пауках семейств Gnaphosidae из степной зоны Предуралья, полученные в результате обширных полевых работ, проведенных в последнее десятилетие. Один вид, *Civizelotes aituar* sp.n. (♂), описан как новый. Обсуждаются таксономические проблемы и распространение 11 видов: *Civizelotes pygmaeus* (Miller, 1943), *Drassodes chybyndensis* Esyunin et Tuneva, 2002, *D. longispinus* Marusik et Logunov, 1995, *D. lutescens* (C.L. Koch, 1839), *D. platnicki* Song, Zhu et Zhang, 2004, *Drassyllus sur* Tuneva et Esyunin, 2003, *Gnaphosa lucifuga* (Walckenaer, 1802), *G. pilosa* Saveljeva, 1972, *Trachyzelotes manytchensis* Ponomarev et Tsvetkov, 2006, *Urozelotes trifidus* Tuneva, 2003 и *Zelotes rufi* Efimik, 1997. Синонимизированы два вида: *Drassodes natali* Esyunin et Tuneva, 2002 syn.n. с *D. platnicki* Song, Zhu et Zhang, 2004 (замещающее имя для *D. lesserti* Schenkel, 1936); и *Zelotes fallax* Tuneva et Esyunin, 2003 syn.n. с *Z. rufi* Efimik, 1997. Диагностические признаки всех видов проиллюстрированы. Шесть видов, *Gnaphosa mandschurica* Schenkel, 1963, *Haplodrassus bohemicus* Miller et Buchar, 1977, *H. orientalis* (L. Koch, 1866), *Micaria bosmansi* Kovblyuk et Nadolny, 2008, *Parasyrisca arrabonica* Szinetár et Eichardt, 2009 и *Talanites mikhailovi* Platnick et Ovtsharenko, 1991, впервые зарегистрированы в фауне Оренбургской области; один ранее отмечавшийся вид — *Gnaphosa*

betpaki Ovtsharenko, Platnick et Song, 1992 — исключен из регионального списка.

Introduction

The present paper is a continuation of our earlier studies on the Ural gnaphosid fauna [Esyunin, Tuneva, 2002; Tuneva, Esyunin, 2002, 2003a, b; Tuneva, 2007]. At the moment, 91 gnaphosid species are known from the Urals [Tuneva, Esyunin, 2009], of which the majority (64 species; 70%) are recorded from the Cis-Ural steppe zone.

During the past decade, since our last publication on this topic, numerous materials have been collected from various localities of the steppe zone of Orenburg Area (the southern Cis-Urals). A number of species that are new to the regional fauna have been found in this material. Yet, the species which were described from singletons are now represented by long series. This allowed us to assess a variation of their morphological characters and provide updated diagnoses.

The aims of this paper are as follows: (1) to describe a new *Civizelotes* species, (2) to clarify descriptions of some poorly known gnaphosid species, (3) to propose and justify two new synonyms, (4) to discuss the most interesting faunistic records, and (5) to correct regional mistaken identifications.

Material and methods

This paper is based both on newly collected gnaphosid specimens and on museum collections. The studied material has been deposited in or borrowed from the following museums (the curator name is given in parentheses): ISEA — Institute of Systematics and Ecology of Animals, Novosibirsk, Russia (G.N. Azarkina); MMUE — The Manchester Museum, University of Manchester, UK (D.V. Logunov); PSU — Zoological Museum of the Perm State University, Perm, Russia (S.L. Esyunin); ZMMU — Zoological Museum of the Moscow State University, Moscow, Russia (K.G. Mikhailov).

SEM micrographs were made by means of Hitachi TM3000 SEM microscope with BSE (back-scattered electrons) at the Perm State University. Colour digital images was taken manually by using Olympus OMD EM-10 digital camera with Panasonic Lumix H-H025 25 mm f/1.7 lens mounted on Zeiss microscope. Digital images were then processed by using the Photoshop CS6 image stacking software.

The terminology of the gnaphosid copulatory organs morphology follows Platnick, Shadab [1976, 1982, 1983] for the genera *Drassodes*, *Drassylus* and *Zelotes* accordingly, and Kovblyuk [2005] for the genus *Gnaphosa*.

Collector's names of those who collected five or more samples are abbreviated as follows: ESL — S.L. Esyunin, FGS — G.Sh. Farzalieva, GAV — A.V. Gromov, KVO — V.O. Koz'minykh, LDV — D.V. Logunov, SSS — S.S. Sokolova, TTK — T.K. Tuneva, ZVK — V.K. Zinchenko.

The following abbreviations are used in the text: AER — anterior eye row; ALE — anterior lateral eye; AME — anterior median eye; d — dorsal; PER — posterior eye row; pl — prolateral; PLE — posterior lateral eye; PME — posterior median eye; rl — retrolateral; RTA — retrolateral tibial apophysis; v — ventral. The leg measurements are given in the following order: total length (femur, patella+tibia, metatarsus, tarsus). All measurements are given in millimeters.

Survey of species

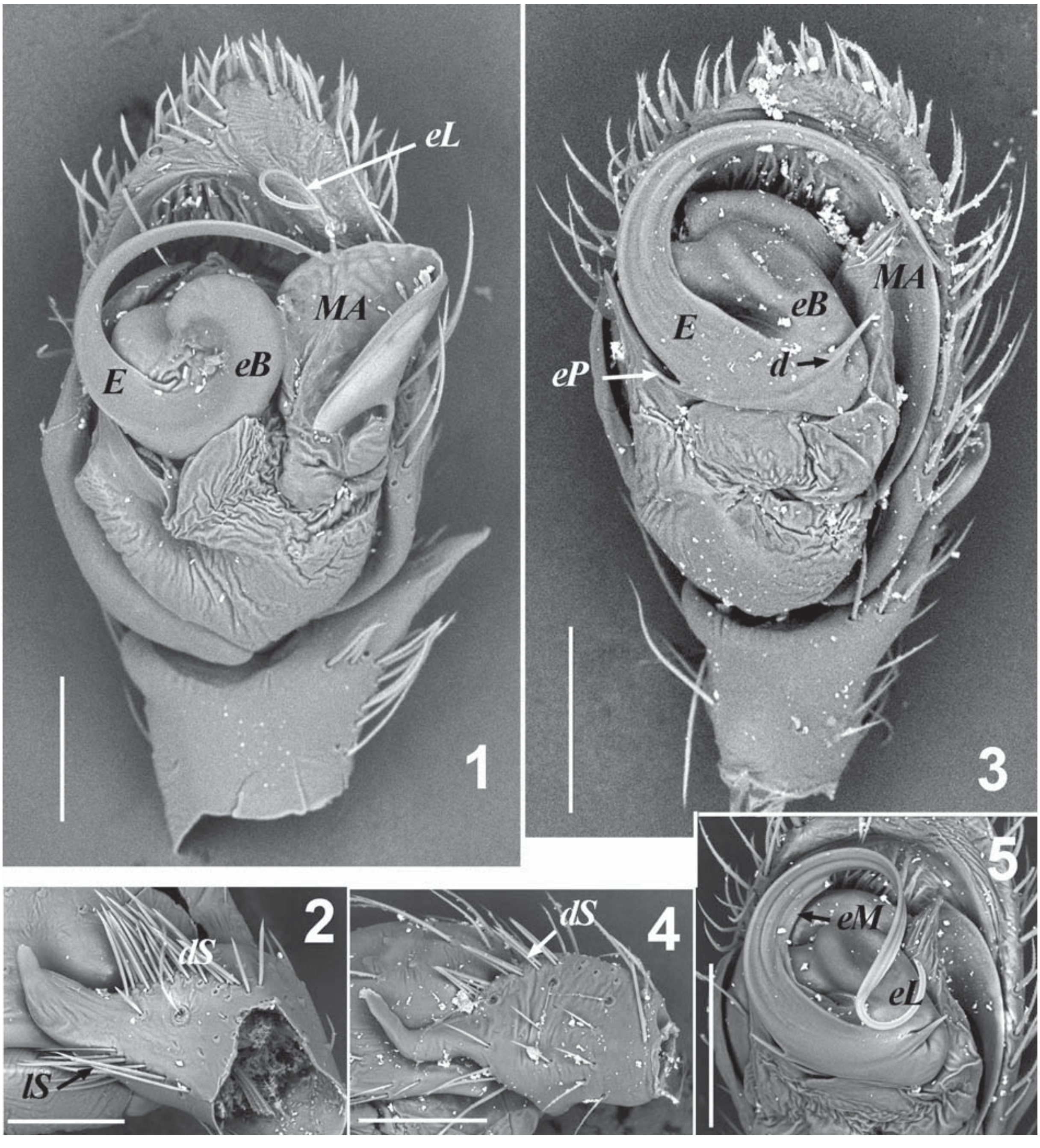
Civizelotes aituar **sp.n.**
Figs 1, 2.

TYPE: Holotype ♂ (ZMMU) from Russia, Orenburg Area, Kuvandyk Distr., nr. Aituar Vil. (51°07′N, 57°39′E), 'Aituarskaya Steppe' division of Orenburg Reserve, multiherbaceous steppe, 27.V–7.VI.1996, N.S. Mazura.

ETYMOLOGY. The species name is a noun in apposition referring to the type locality.

DIAGNOSIS. *Civizelotes aituar* sp.n. belongs to the *gracilis* species group (*sensu* Senglet, 2012) and, by the looped embolus with a membranous flop and lateral lamellar median apophysis, is most similar to *C. gracilis* (Canestrini, 1868) and *C. pygmaeus* (Miller, 1943) (see Figs 3–4; Miller [1967: pl. 4, figs 1–4, 5–8]; Grimm [1985: figs 232, 233]). The new species can easily be distinguished from them by (1) the absence both of the denticle on the embolic base and of the embolar projection (with the embolic projection in *C. gracilis* and *C. pygmaeus*; see Figs 3, 5 and fig. 233b in Grimm [1985]), and (2) by the broad median apophysis with its outer part being curved at the right angle (*MA*; Fig. 1), compared to the narrow median apophysis with the free narrow external part directed backward in *C. pygmaeus* and *C. gracilis* (see Figs 3, 5 and figs 4, 7 in Miller [1967, Pl. 4]). *C. aituar* sp.n. is less similar to *Marjanus platnicki* (Zhang, Song et Zhu, 2001), from which is can easily be distinguished by the shorter and thicker RTA (long, thin and pointed in *M. platnicki* [Chatzaki, 2018: figs 6, 11, 12]) and the longitudinal median apophysis (not transverse, as in *M. platnicki* [Chatzaki, 2018: fig 11]).

DESCRIPTION. Male. Small spider, total length 3.3. Carapace length 1.4, width 1.1; shiny yellow-brown, with light sparse setae. Eyes field blackish, AER width 0.28, PER width 0.31. Medial eyes field trapezoid: length 0.18, width 0.14 anteriorly and 0.18 posteriorly. Eye sizes: AME = ALE = PLE 0.07, PME (oval) 0.06 × 0.08. Eyes of the anterior row touch each other; eyes of the posterior row are slightly separated from each other: PLE-PME 0.03, PME-PME 0.01. All eyes light except for black AMEs. AER straight, PER slightly procurved. Chelicerae yellow, with 4 long setae along the inner side of basal segment, and numerous setae on the inner surface. Cheliceral furrow with some very small teeth and a row of setae on the promargin, but with no teeth on retromargin. Labium and maxillae yellow, with a white tip. Sternum yellow, with grey radial lines. Legs coloration: femur yellow; other segments greyish yellow. Leg formula is IV>I>II>III. Leg measurements: I 3.56 (0.99, 1.39, 0.62, 0.56), II 3.05 (0.85, 1.13, 0.57, 0.49), III 2.56 (0.69, 0.87, 0.56, 0.45), IV 4.21 (1.12, 1.55, 1.01, 0.53). Leg spination: Femur I and II d1-1-0; III d1-1-0, pl 0-1-1, rl 0-1-1; IV d1-1-1, pl 0-0-1, rl 0-0-1; Tibia I and II without distinguish spines; III pl 1-0-1, rl 0-1-1, v 2-2-2; IV pl 1-0-1, rl 0-2-0, v 2-2-2; Metatarsi I and II without distinguish spines; III pl 0-2-2, rl 1-1-2, v 2-0-0; IV pl 1-2-2, rl 1-2-1, v 2-0-0. Spines of femur I thin, resembling long bristles; those of femurs III and IV thick and long. Metatarsi III and IV with a preening comb. Metatarsus and tarsus I and II with numerous setae



Figs 1–5. *Civizelotes aituar* sp.n. (1–2) and *C. pygmaeus* (Miller, 1943) (3–5), scanning electron micrographs: 1, 3 — male palp, ventral view, 2, 4 — tibia of male palp, lateral view, 5 — bulbus, ventral view. Abbreviations: *d* — denticle of the embolic base; *dS* — dorsal row of spines; *E* — embolus; *eB* — embolic base; *eL* — loop of embolic tip; *eM* — membrane of embolus; *eP* — embolic projection; *lS* — retrolateral row of spines; *MA* — median apophysis. Scale bars: 0.1 mm

Рис. 1–5. *Civizelotes aituar* sp.n. (1–2) и *C. pygmaeus* (Miller, 1943) (3–5), сканирующие электронные микрофотографии: 1, 3 — пальпа, снизу, 2, 4 — голень пальпа самца, сбоку, 5 — бульбус, снизу. Сокращения: *d* — зубчик основание эмболюса; *dS* — дорсальный ряд щетинок; *E* — эмболюс; *eB* — основание эмболюса; *eL* — петля вершины эмболюса; *eM* — мембрана эмболюса; *eP* — отросток эмболюса; *lS* — латеральный ряд щетинок; *MA* — срединный отросток. Масштаб: 0,1 мм.

and hairs protruding in all directions. Abdomen length 1.9, width 1.1; grey-yellow; book lung operculum yellow. Scutum triangular, covering one-third of the abdominal dorsal surface. Anterior lateral spinnerets cylindrical, separated from each other by their diameter. Palp. Embolic base (*eB*) is situated at the apical-prolateral part of the tegulum (Fig. 1). Embolus originates from the posterior part of embolic base, making a semicircle, turning dorsally and forming a loop (*eL*, Fig. 1). Its semicircle part with a membrane, broadening at its base and evenly narrowing to its apex. Median apophysis large lamellar, situated retrolaterally (*MA*, Fig. 1); its outer part is curved at right angles to the base. Palpal femur

with two (d0-1-1) and patella with one (d0-0-1) dorsal spines. Palpal tibia with dorsal (*dS*) and retrolateral (*lS*) rows of spines (Fig. 2). RTA is directed laterad and frontwards; its tip curved dorsally (Fig. 2).

FEMALE unknown.

DISTRIBUTION. The type locality only.

Civizelotes pygmaeus (Miller, 1943)
Figs 3–5.

Zelotes pygmaeus: Miller, 1943: 16, pl. I, figs 7–12 (♂♀).

Zelotes pygmaeus: Miller, 1967: 269, pl. IV, figs 5–8, pl. VII, fig. 8 (♂♀).

Zelotes pygmaeus: Grimm, 1985: 284, figs 232, 236–237 (♂♀).

Zelotes gracilis (nec Canestrini): Thaler, Noflatscher, 1990: 176, figs 35–36 (♂).

For a complete list of the taxonomic references see WSC [2018].

MATERIAL. **Russia**, **Orenburg Area**: 5 ♂♂, 1 ♀ (PSU-394), Kuvandyk Distr., 'Aituarskaya Steppe' division of Orenburg Reserve (51°06′47″N, 57°39′25″E), steppe, 17.V–1.VI.1996, Mazura N.S., 18–23.V.2017, ESL; 54 ♂♂, 9 ♀♀ (PSU-1182), Sol-Iletsk Distr., c. 10 km W of Troitsk Vil., Chybynda (=Shybynda) gully (50°40′52″N, 54°27′28″E), chalk slope, bank of a man-made lake in steppe, 5–12.VI.2000, ESL; 2 ♂♂, 2 ♀♀ (PSU-3738), same locality, steppe of *Stipa* and another herbs, 7–14.VI.2003, TTK; 1 ♂, 1 ♀ (PSU-3739), Sol-Iletsk Distr., Novoiletsk Vil., 5–15.VI.2003, TTK; 1 ♂ (PSU-3189), Svetlyi Vil., Shalkar-Igiz-Kara Lake, saline land, 10–16.VI.2002, TTK; 1 ♂ (PSU-4294), Orenburg Distr., c. 3 km NE of Pervomajskij Vil., Donguzskaya Steppe (51°33′14″N, 55°01′37″E), steppe, 11–20.V.2007, KVO; 3 ♂♂ (PSU-7616), Svetlyi Distr., 'Ashchisayskaya Steppe' division of Orenburg Reserve (50°57′38″N, 61°12′44″E), steppe with *Artemisia* and other herbs, VI.2015, SSS; 5 ♂♂, 5 ♀♀ (PSU-7615), same locality, sandy drift near steppe pond, steppe with *Spirea*, VI.2016, ESL; 5 ♂♂, 1 ♀ (MMUE), same locality, rubbly steppe, saline land, VI.2016, ESL. **Chelyabinsk Area**: 9 ♂♂, 4 ♀♀ (PSU-3699), Troitsk Distr., Uj River, stony steppe with shrub, 8.VII.1994, ESL. **Bashkortostan**: 1 ♀ (PSU-6957), Meleuz Distr., Syrtlanovo Vil., *Festuca-Stipa* steppe, 22.VII–1.VIII.1990, V.E. Efimik.

REMARKS. *C. pygmaeus* was first described from the vicinity of Mohelno Town in Czech Republic, where it inhabits steppes on the serpentinite [Miller, 1943]. Miller mentioned that the male of *C. pygmaeus* is extremely close to that of *C. gracilis*, from which it can be distinguished by the following characters: (1) the longer RTA ("Durch die Größe und durch den Bau der Kopulationsorgane steht diese Spinne am nächsten der Art *Zelotes gracilis* … Die Tibialapophyse ist länger und hat eine andere Form" [Miller, 1943: p. 17]), (2) the presence of a large denticle at the embolic base (*d*, Fig. 3;"s" – "Zahn der basalen Embolusplatte" in Miller [1967] and "x_1" in Grimm [1985]), compared to the poorly discernible denticle [Miller, 1967, table IV, fig. 4 and unnumbered fig. at the bottom-middle of table IV] or none [Grimm, 1985, fig. 233b] in *C. gracilis*, (3) the short and thin embolar projection (*eP*, Fig. 3; "n — basaler Zahn (Nebenarm) des Embolus" in Miller [1967] and "x_2" in Grimm [1985]), compared to the long and rounded embolic projection in *C. gracilis* [Miller, 1967, table IV, fig. 4 and unnumbered fig. at the bottom-middle of table IV; Grimm, 1985, fig. 233b].

Thaler & Noflatscher [1990] provisionally identified and illustrated males from South Tyrol as *Zelotes gracilis*. Maria Chatzaki, who re-examined the material presented in their paper, confirmed that "*the material recorded in that paper clearly belongs to C. gracilis*" (Chatzaki, pers. comm., 10 August 2017). The problem is that figs 35–36 in Thaler & Noflatscher [1990] undoubtedly show a different species, viz., *C. pygmaeus*. All the diagnostic characters that are typical of *C. pygmaeus* are illustrated in the cited figures: (1) RTA bent upward (fig. 36 in Thaler & Noflatscher [1990]), (2) a distinguishable denticle at the embolic base ("s" in fig. 35 in Thaler & Noflatscher [1990]), and (3) the short pointed embolic projection ("n" in fig. 35 in Thaler & Noflatscher [1990]).

DISTRIBUTION. West-Palaearctic steppe range: from Italy and Austria [Nentwig *et al.*, 2018] to East Kazakhstan Area [Eskov, Marusik, 1995] and the Altai [Azarkina, Trilikauskas, 2013].

Drassodes chybyndensis Esyunin et Tuneva, 2002
Figs 6, 7.

Drassodes lapidosus (nec Walckenaer): Hu, Wu, 1989: 257, fig. 210.1–6 (♂♀, misidentification).

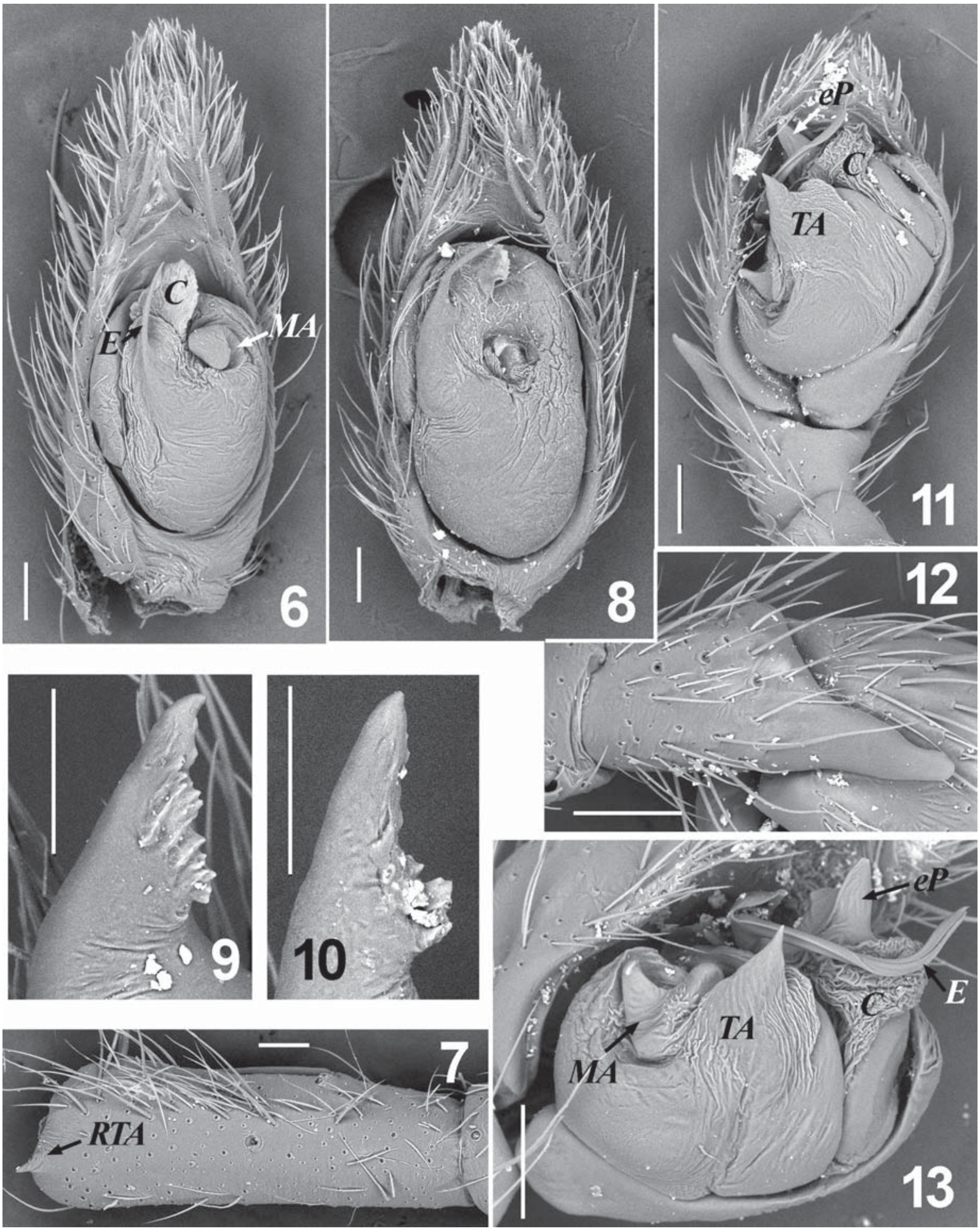
Drassodes chybyndensis Esyunin et Tuneva, 2002: 169, figs 1–7 (♂♀).

Drassodes chybyndensis: Marusik, Logunov, 2011: 60, figs 19–26 (♂♀).

Drassodes chybyndensis: Namaghi *et al.*, 2016: 18, fig. 1a–b, 2a–d (♂♀).

MATERIAL. **Russia**, **Orenburg Area**: Paratype 1 ♂ (PSU-1413), Sol-Iletsk Distr., c. 10 km W of Troitsk Vil., Chybynda (=Shybynda) gully (50°40′52″N, 54°27′28″E), shrub steppe on chalky rock, 5–12.VI.2000, ESL; 1♂ (PSU-3752), same locality, steppe, 14.VI.2003, TTK; 1 ♂ (PSU-3753), Kuvandyk Distr., mouth of Alimbet River (51°04′5″N, 57°37′4″E), steppe, 8.V.2003, TTK; 1 ♂ (PSU-6493), Svetliy Distr., c. 12 km S of Yasnyi Vil., steppe, under stone, 7.V.2015, ESL; 3 ♂♂ (PSU-6494), same distr., Boevaya Gora, stony & shrub steppes, 2–10.V.2015, ESL; 4 ♂♂ (PSU-7611), same distr., 'Ashchisayskaya Steppe' division of Orenburg Reserve (50°57′38″N, 61°12′44″E), stony steppe, 6.V.2015, ESL; 3 ♂♂ (MMUE), same locality, stony steppe, 6.V.2015, S.V. Dedyukhin. **Kazakhstan, South Kazakhstan Area**: 1 ♀ (PSU-5985), c. 40 km N of Talap Vil., Karatau Mt. Range, bank of Besaryk River, 43°45.748′N, 67°49.085′E, 6.V.2010, TTK; 1 ♂ (PSU-6362), c. 40 km NE of Sholakk-Kurgan, Karatau Mt. Range (43°41′N, 68°49′E), 860 m a.s.l., 3.V.2012, A.V. Ivanov. **East-Kazakhstan Area**: 1 ♀ (ISEA, 001.7932), western branch of Narymskiy Mt. Range, nr. Aktobe, desert, 3–4.V.1999, I. Lyubarskiy, A. Korolyuk; 1 ♀ (ISEA, 001.7947), South Altai Mt. Range, Markakol Lake, nr. Urumkhalka, (48°47′N, 86°01′E), 10.VI.1998, GAV; 1 ♂ (ISEA, 001.7934), Dzhungar Alatau Mt. Range, c. 4 km NW of Tekeli Town, c. 2050 m a.s.l. (44°53′N, 78°50′E), 13.VI.1999, GAV; 1 ♀ (ISEA), Tarbagatai Mts, north-western Manrak Range, Tayzhuzgen River, 6.IX.1997, R. Dudko, ZVK; 1 ♀ (ISEA), Urzhar Distr., nr. Kabanbay Vil. (46°04′N 82°05′E), Aranzan-Tay Mt., *Stipa-Artemisia* steppe, 8.V.2002, I.I. Lyubechanskii; 1 ♂ (ISEA), western branch of Narymskiy Mt. Range, c. 15 km SE of Slavyanka Vil., petrophytous steppe, 6.V.1999, I. Smelyanskiy. **Kyrgyzstan**: 2 ♀♀ (ISEA, 001.7944), Sarykamysh Mt. Range, c. 8 km SW of Kyzyloy, 2500–2800 m a.s.l., 16–18.VIII.1998, GAV; 1 ♂, 1 ♀ (ISEA, 001.7939), western end of Issyk-Kul Lake, c. 5 km SW of Balykchy (=Rybachye) Town (42°24′N, 76°06′E), 25.VI.1999, GAV; 2 ♀♀ (ISEA, 001.7943), western end of Issyk-Kul Lake, c. 2 km SW of Balykchy (=Rybachye) Town (42°27"N, 76°08"E), 24.VI.1999, GAV. **Tajikistan**: 1 ♀ (ISEA, 001.7897), Tavildara Distr., flood-plain of Balangu River, northern branch of Khazratishokh Mt. Range, 1880–1975 m a.s.l. (38.65°N, 70.52°E), pitfall traps, 8–15.V.2016, ZVK; 1 ♂ (ISEA, 001.7881), same locality, pitfall traps, 15–21.V.2016, ZVK. **Turkmenistan**: 1 ♂ (ISEA), c. 30 km SE of Shakhrisabz (39°03′N, 66°50′E), 1200–1300 m a.s.l., 25.IV.1993, LDV; 1 ♂ (ISEA), western Kichitang, c. 5 km SE Bäherden (38°25′N, 57°26′E), 5–11.IV.1991, V.V. Dubatolov, ZVK.

REMARKS. *D. chybyndensis* was described from the south steppe zone, from the territory situated at the border between Orenburg Area of Russia and Aktyubinsk Area of Kazakhstan. Later, Marusik & Logunov [2011] recorded



Figs 6–13. *Drassodes chybyndensis* Esyunin et Tuneva, 2002 (6–7), *D. platnicki* Song, Zhu et Zhang, 2004 (8–10) and *Drassyllus sur* Tuneva et Esyunin, 2003 (11–13), scanning electron micrographs: 6, 8, 11 — male palp, ventral view, 7, 12 — tibia of male palp, lateral view, 9, 10 — tip of retrolateral tibial apophysis (RTA), 13 — bulbus, apical view. Abbreviations: *C* — conductor; *E* — embolus; *eP* — embolar projection; *MA* — median apophysis; *TA* — terminal apophysis. Scale bars: 0.1 mm.

Рис. 6–13. *Drassodes chybyndensis* Esyunin et Tuneva, 2002 (6–7), *D. platnicki* Song, Zhu et Zhang, 2004 (8–10) и *Drassyllus sur* Tuneva et Esyunin, 2003 (11–13), сканирующие электронные микрофотографии: 6, 8, 11 — пальпа, снизу; 7, 12 — голень пальпа самца, сбоку; 9, 10 — вершина ретролатерального отростка голени (RTA), 13 — бульбус, спереди. Сокращения: *C* — кондуктор; *E* — эмболюс; *eP* — отросток основания эмболюса; *MA* — срединный отросток; *TA* — терминальный отросток. Масштаб: 0,1 мм.

this species from East Kazakhstan. Hu & Wu [1989] recorded and illustrated *D. lapidosus* (Walckenaer, 1802) from the neighboring Chinese Province of Xinjiang. The specimens of *Drassodes* aff. *chybyndensis* from central Xinjiang studied by Marusik *et al*. [2007] slightly differ from those of *D. chybyndensis* from East Kazakhstan, as follows: the longer RTA and slightly different proportions of the epigyne. It is likely that these differences reflect just an intra-specific variation rather than species differences. Thus, the specimens of *D. lapidosus* recorded from Xinjiang seemed to have been misidentified and some/many records of this species by Hu & Wu [1989: fig. 213, Map] should actually be referred to *D. chybyndensis*.

DISTRIBUTION. Central ancient-Mediterranean steppe-desert range: from the western shore of Caspian Sea and Iran to NW China.

South-European Russia: Dagestan, Krasnodar Territory, Astrakhan and Orenburg Areas [Ponomarev, Mikhailov, 2007: sub *D. lacertosus*; Ponomarev *et al*., 2011: sub *D. lacertosus*; Abdurakhmanov *et al*., 2012; Ponomarev, Dvadnenko, 2013; Ponomarev, Abdurakhmanov, 2014]. Kazakhstan: Mangystau, Kostanay, South Kazakhstan and East Kazakhstan Areas [Marusik, Logunov, 2011; Ponomarev, Abdurakhmanov, 2014; Ponomarev, Bragina, 2014; present data]. Turkmenistan, Tajikistan and Kyrgyzstan [present data]. Iran: Razavi Khorasan Province [Namaghi *et al.*, 2016]. North-West China: Xinjiang [Hu, Wu, 1989: sub *D. lapidosus*; Marusik *et al.*, 2007: sub *D.* aff. *chybyndensis*].

Drassodes longispinus Marusik et Logunov, 1995
Figs 14, 15.

Drassodes longispinus Marusik, Logunov, 1995: 185, figs 26–33 (♂♀).

Drassodes serratidens: Hu, Wu, 1989, 258, fig. 211.3 (♂ only; Fig. 211.1–2; ♀ — ?*D. platnicki* Song, Zhu et Zhang, 2004).

Drassodes longispinus: Song *et al*., 2004, 62, fig. 32A–F (♂♀).

Drassodes longispinus: Zhu, Zhang, 2011, 383, fig. 274A–F (♂♀) (copied from Song *et al*. [2004]).

Drassodes lesserti: Esyunin, Tuneva, 2002, 172, figs 60–62 (♀; misidentification).

Drassodes platnicki: Tuneva, Esyunin, 2012, 374, figs 1–3 (♀; misidentification).

MATERIAL. **Russia**, **Orenburg Area**: Paratype of *D. natali* 1 ♂ (PSU-1415), Sol-Iletsk Distr., c. 10 km W of Troitsk Vil., Chybynda (=Shybynda) gully (50°40′52″N, 54°27′28″E), wormwood (*Artemisia*) steppe, 6–12.VI.2000, ESL; 2 ♀♀ (PSU-1928: as *D. lesserti*), Sol-Iletsk Distr., c. 10 km W of Troitsk Vil., Chybynda (=Shybynda) gully 50°40′52″N 54°27′28″E, steppe, 17.VIII.2001, ESL & FGS; 2 ♂♂ (PSU-3727), same locality, chalk slope with *Cytisus*, *Stipa*-grass steppe, 14–15.VI.2003, TTK; 2 ♂♂ (PSU-7613), Svetlyi Distr., ‘Ashchisayskaya Steppe’ division of Orenburg Reserve (50°57′38″N, 61°12′44″E), white-land plots within *Artemisia* steppe, 25.VI.2017, ESL; 3 ♂♂ (PSU-7614), same locality, steppe with white-land plots, 25.VI.2017, ESL; 1 ♀ (PSU-8263), Belyaevka Distr., ‘Burtinskaya Steppe’ division of Orenburg Reserve (51°22′N, 55°59′E), steppe, VIII.2016, V.A. Nemkov. **Chelyabinsk Area**: 4 ♀♀ (PSU-6534: as *D. platnicki*), Verkhneural’sk Distr., Leonovskie Gory Mt. Ridge, Bolshaya Mt., under stone, 27.VI.2009, TTK. **Krasnoyarsk Territory**: 1 ♀ (PSU-1904), Stolby Reserve (55°53′N, 92°46′E), mountain steppe, 25.VII. 2001, A.Yu. Sipaeva. **Tuva:** 1 ♂ (ISEA, det. Yu.M. Marusik), confluence of Biy-Khem (=Yenisei) and Uyuk Rivers (52°04′N 94°22′E), 670 m a.s.l., *Stipa-Artemisia* shrub steppe, 3–5.VI.1995, LDV. **Chita Area**: 1 ♀ (ISEA), Adon-Chelon massif, Tsalan-Obo Mt., c. 23 km E of Kholui-Baza, 8–9.VII.1996, V.V. Dubatolov, O.V. Kosterin; 1 ♂ (ISEA), Daursky Nature Reserve, north bank of Zun-Torey Lake, steppe, 10–12.VI.1995, V.V. Dubatolov.

DESCRIPTION. The species is well-described and illustrated (the relevant references are given above).

REMARKS. The authors of the original description noticed that “*the new species has unique for Drassodes long and curved into some loops seminal duct of the male bulbus*” [Marusik, Logunov, 1995: 185]. Further studies have shown that this character is variable. The loop of the seminal duct does not always have a secondary curvature as in figs 26 and 28 in Marusik & Logunov [1995] and often it is evenly rounded (see fig. 32.C in Song *et al.* [2004] or fig. 27 in Marusik & Logunov [1995]). Such males are very difficult to distinguish from those of *D. platnicki*. According to our observations, the following diagnostic character is more stable and reliable: viz., the loop of the sperm duct is extended along the bulb (its apex is as if pushed-in) in *D. longispinus* (this loop is transverse in *D. platnicki*) and it is narrow in most of the specimens studied by us. Besides, all the Cis-Ural males, like those of the type series of *D. longispinus*, have an unclear but discernible dorsum colour pattern, similar to that of *D. serratidens* Schenkel, 1963. The male dorsum coloration of *D. platnicki* varies but always with no colour pattern of transverse stripes in the posterior half of dorsum.

Apparently, the males which were identified and illustrated as *D. serratidens* by Hu & Wu [1989] from the Chinese Province of Xinjiang show a dorsum colour pattern. However, by the shape of the seminal duct loop [Hu, Wu, 1989: fig. 211.3], the illustrated male undoubtedly belongs to *D. longispinus*. The female illustrated by the same authors [Hu, Wu, 1989: fig. 211.1–2] is likely to belong to *D. platnicki*. Thus, we suspect that the records of *D. serratidens* from Xinjiang by Hu & Wu [1989: fig. 213, Map] should be referred to *D. longispinus* (♂♂) and ?*D. platnicki* (♀♀).

The females of *D. longispinus* is similar to that of *D. platnicki* and *D. jiufeng* Tang, Song et Zhang, 2001, but can be separated from both by the short lateral epigynal margins, not reaching the terminal lobes of spermathecae (*LM*, Figs 14, 15). Besides, the basal lobes of spermathecae (*BL*, Figs 14, 15) extend beyond the lateral margins of the fovea in *D. longispinus* (see also Seo [2017: fig.2.B–E]), whereas they are situated at the fovea margins in *D. platnicki* (Figs 17–18, aslo fig. 17 in Marusik & Logunov [1995] and fig. 35.A–B in Song *et al.* [2004]).

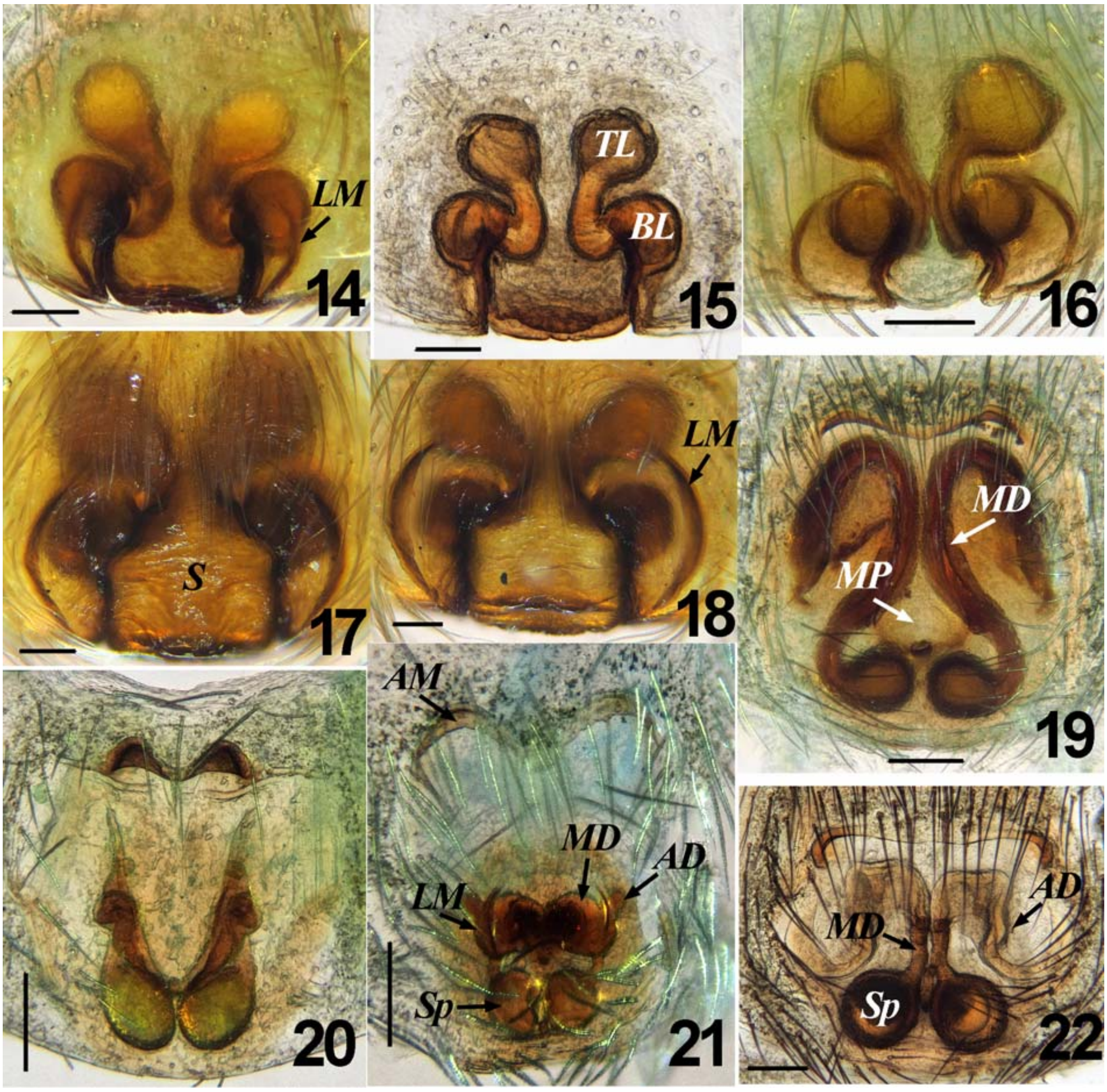
Some of the Ural females of *D. longispinus* were misidentified by Esyunin & Tuneva, [2002] and Tuneva & Esyunin [2012] as *D. platnicki*.

DISTRIBUTION. Central-East-Palaearctic steppe-mountain range: from the South Urals to Korea.

Russia, the South Urals [Tuneva, Esyunin, 2012: as *D. platnicki*]; steppe of the Cis-Urals [Esyunin, Tuneva, 2002: as *D. lesserti*]; the steppe zone of West Siberia [present data]; South Siberia: the Altai, Krasnoyarsk and Zabaikalskiy areas and Tuva [Marusik, Logunov, 1995; Logunov *et al.,* 1998; Danilov, 2008; Marusik *et al*., 2000; Azarkina, Trilikauskas, 2013; present data]; Mongolia: Töv Province [Marusik, Logunov, 2006]; China: Xinjiang, Tibet, Henan, Guangxi and Hebei provinces [Hu, Wu, 1989: sub *D. serratidens*; Song *et al.*, 2004; Zhu, Zhang, 2011]; Korea [Seo, 2017].

Drassodes lutescens (C.L. Koch, 1839)
Fig. 16.

Drassodes mazurae Esyunin, Tuneva, 2002: 172, figs 15–18 (♂).



Figs 14–22. Epigyne of *Drassodes longispinus* Marusik et Logunov, 1995 (14–15), *D. lutescens* (C.L. Koch, 1839) (16), *D. platnicki* Song, Zhu et Zhang, 2004 (17–18), *Drassyllus sur* Tuneva et Esyunin, 2003 (19), *Zelotes rufi* Efimik, 1997 (20), *Urozelotes trifidus* Tuneva, 2003 (21) and *Trachyzelotes manytchensis* Ponomarev et Tsvetkov, 2006 (22). Abbreviations: *AD* — anterior epigynal duct; *AM* — anterior epigynal margin; *BL* — basal lobe of spermatecae; *LM* — lateral epigynal margin; *MD* — median epigynal duct; *S* — septum; *Sp* — spermatecae; *TL* — terminal lobe of spermatecae. Scale bars: 0.1 mm.

Рис. 14–22. Эпигина *Drassodes longispinus* Marusik et Logunov, 1995 (14–15), *D. lutescens* (C.L. Koch, 1839) (16), *D. platnicki* Song, Zhu et Zhang, 2004 (17–18), *Drassyllus sur* Tuneva et Esyunin, 2003 (19), *Zelotes rufi* Efimik, 1997 (20), *Urozelotes trifidus* Tuneva, 2003 (21) и *Trachyzelotes manytchensis* Ponomarev et Tsvetkov, 2006 (22). Сокращения: *AD* — передние каналы эндогины; *AM* — передний край эпигины; *BL* — базальная доля сперматеки; *LM* — латеральный край эпигины; *MD* — срединные каналы эндогины; *S* — септум; *Sp* — сперматека; *TL* — терминальная доля сперматеки. Масштаб: 0,1 мм.

Drassodes natali Esyunin, Tuneva, 2002: 173, figs 19–21 (♀ only; mismatched).

Drassodes lutescens: Levy, 2004: 14, figs 33–39 (♂♀).

Drassodes lutescens: Kovblyuk, 2008: 16, fig. 4.1–5 (♂♀).

Drassodes lutescens: Chatzopoulou, Chatzaki, 2009: 352, figs 3–24 (♂♀).

For a complete list of the taxonomic references see WSC [2018].

MATERIAL. **Russia**, **Orenburg Area**: 4 ♀♀ (PSU-1416: Paratypes *D. natali*), Kuvandyk Distr., 'Aituarskaya Steppe' division of Orenburg Reserve (51°06′47″N, 57°39′25″E), southern rock slope, under stones, 15.V.1997, ESL; 1 ♂ (PSU-3710), 7 ♀♀ (PSU-3714), same distr., Kiy River (50°58′N, 57°18′E), stony slope, under stones, 10–11.V.2003, TTK; 1 ♀ (PSU-3032), same distr., Karagala (= Katrala) River (51°42”N, 57°29”E), stony slope, under stones, 2.VII.2002, TTK; 1 ♂, 2 ♀♀ (PSU-7907), same distr., Shaytan-Tau Nature Reserve (51°40′N, 57°27′E), stony steppe, under stones, 10.V.2018, ESL & FGS; 2 ♂♂ (PSU-3709), 6 ♀♀ (PSU-3713), Sol-Iletsk Distr., c. 10 km W of Troitsk Vil., Chybynda (=Shybynda) gully (50°40′52″N, 54°27′28″E), steppe on chalky

rock, steppe, 7–10.VI.2003, TTK; 1♀ (PSU-7976), Belyaev Distr., nr. Donskoye Vil., Verblyuzhka Mt., steppe slope, 10.V.2009, TTK.

REMARKS. The type series of *D. natali* Esyunin, Tuneva, 2002 turned out to be heterogeneous. The holotype male is conspecific with *D. platnicki* Song, Zhu et Zhang, 2004, the paratype males to *D. longispinus*, and the paratype females to *D. lutescens* (Fig. 16). For detail see Remarks given below under *D. platnicki*.

DISTRIBUTION. West-Central-Palaearctic subboreal-steppe range [Kovblyuk, Kastrygina, 2015].

Drassodes platnicki Song, Zhu et Zhang, 2004
Figs 8–10, 17, 18.

Drassodes lesserti Schenkel, 1936: 254, fig. 83 (♂; preoccupied by *D. hispanus lesserti* Schenkel, 1936).

Drassodes lesserti: Marusik, Logunov, 1995: 182, figs 13–18 (♂♀).

Drassodes natali Esyunin, Tuneva, 2002: 173, figs 22–25 (holotype ♂ only). **Syn.n.**

Drassodes platnicki: Song *et al.*, 2004: 67, fig. 35A–D (♂♀; replaced name).

For a complete list of the taxonomic references see WSC [2018].

MATERIAL. **Russia**, **Orenburg Area**: 3 ♂♂ (PSU-5908), Belyaev Distr., near Donskoye Vil., Verblyuzhka Mt., steppe slope, 10.V.2009, TTK. **Tuva**: 2 ♂♂, 3 ♀♀ (ISEA), Ovyursky Distr., c. 10 km N of Ak-Chyraa Vil., Irbitel River valley (50°44"N, 93°08"E), 1000–1050 m a.s.l., 13–16.VI.1995, LDV; 1 ♂, 5 ♀♀ (ISEA), south-eastern Tuva, Tes-Khem River valley (50°19′N, 95°01′E), 10.VI.1995, Yu.M. Marusik; 2 ♀♀ (ISEA), south-eastern Tuva, north-eastern bank of Ubsunur Lake (50°40′N, 92°58′E), c. 750 m a.s.l., *Leymus-Salvia-Caragana* association, 18.VII.1993, LDV; 10 ♂♂, 3 ♀♀ (ISEA), same locality and habitat, 14.VI.1995, LDV; 1 ♂ (ISEA), c. 5 km E of Kyzyl, Yenisei River valley, c. 700 m a.s.l., *Salvia* association, 15–22.V.1990, LDV; 2 ♂♂, 1 ♀ (ISEA), 3–5 km N of Kyzyl, 700–800 m a.s.l., *Nanophyton* steppe, 1.V.1990, LDV; 5 ♂♂, 4 ♀♀ (ISEA), 2–3 km N of Kyzyl Town, 700–800 m a.s.l., *Nanophyton* steppe, 20.V.1989, LDV; 1 ♀ (ISEA), nr. Kyzyl, c. 700 m a.s.l., *Stipa-Artemisia* steppe, 25.VI.1989, LDV; 9 ♀♀ (ISEA), c. 5 km E of Kyzyl, 700–900 m a.s.l., *Stipa-Artemisia* steppe, 3.VII.1989, LDV; 1 ♀ (ISEA), c. 3 km S of Kyzyl, c. 700 m a.s.l., *Stipa-Artemisia* steppe, 20.VII.1989, LDV; 1 ♀ (ISEA), Mongun-Tayga Distr., Kargy River valley, 1700–1800 m a.s.l., *Salex-Populus-Larix* forest, 20.V.1990, LDV; 1 ♂, 3 ♀♀ (ISEA), Mongun-Tayga Distr., 4–7 km SE Mugun-Aksy Vil., Kargy River valley, 5.VI.1990, LDV; 1 ♀ (ISEA), Piy-Khemsky Distr., c. 5 km NE of Seserlig Vil., 1000–1100 m a.s.l., steppe slope, 24.V.1989, LDV; 2 ♂♂ (ISEA), Piy-Khemsky Distr., c. 10 km SE of Seserlig Vil., 1100–1200 m a.s.l., *Stipe-Artemisia* steppe, 2.V.1990, LDV; 1 ♂, 6 ♀♀ (ISEA; det. Yu.M. Marusik), 25–30 km W of Erzin Vil., Yamaalych Mt. Range, 1200-1300 m a.s.l., 9–10.VI.1989, LDV; 1 ♀ (ISEA), c. 20 km NW of Erzin Vil., c. 800 m a.s.l., 31.V.1989, LDV; 2 ♂♂ (ISEA), c. 2 km W of Erzin Vil., Erzin River valley, c. 1000 m a.s.l., 23.VI.1990, LDV & O.V. Lyakhov; 2 ♀♀ (ISEA), 20–25 km W of Erzin Vil., Onchalaan Mt. Range, 1300–1400 m a.s.l., under stones, 11-12.VIII.1989, LDV; 3 ♂♂ (ISEA), c. 20 km W of Erzin Vil., Onchalaan Mt. Range, 1200–1300 m a.s.l., 27.V–1.VI.1989, LDV; 1 ♂ (ISEA), 3–5 km E of Erzin Vil., rock, 1100–1200 m a.s.l., 23–25.V.1990, LDV; 1 ♀ (ISEA), c. 20 km W of Erzin Vil., Tes-Khen River valley (50°19′N, 95°01′E), 10.VI. 1995, LDV.

REMARKS. Diagnostic characters of both males and females of *D. platnicki* from Tuva markedly vary. Coloration: carapace yellow with a brownish head to brown with a yellowish thoracic part; abdomen uniformly gray (dirty white in one specimen) or grey with a dark lanceolate spot to black with yellowish (or grey) specks forming a marble pattern (uniformly black in one specimen).

Male palp. Usually, the loop of the sperm duct is transverse, uniformly rounded symmetrical ('drop'-shaped), but it can be narrowed with more or less parallel sides ('half-ellipse'- and 'finger'-shaped), not symmetrical with the projecting leading edge. RTA typically serrated, with numerous small teeth (Fig. 9), but it may possess two/three (even one) large denticles at the base only, or a large denticle at the base and numerous small teeth, or with a crenulate plate at the base and a smooth top (Fig. 10), etc.

Epigyne. The terminal lobe of the spermatheca is usually larger than the basal one (Fig. 17), rarely they are almost of the same size (Fig. 18). The lateral margins of the fovea extend forward to the posterior half of the terminal lobe (Fig. 18), rarely to their anterior half, sometimes to the posterior margin only (Fig. 17). The septum pentagonal, typically with parallel lateral rims (Figs 17, 18), but it may be with the rims tapering posteriorly. The width and length of the septum are typically equivalent, but the septum can also be longitudinal or transverse.

D. natali was described from two localities of the southern Cis-Ural steppe zone. Since then, this species has never been found from outside of the type locality. Re-examination of additional materials from Tuva and the types convinced us that the type series of *D. natali* was of a mixed nature. The holotype male of *D. natali* is conspecific with *D. platnicki*, while the paratype males are identical to *D. longispinus* and the paratype females to *D. lutescens*.

DISTRIBUTION. Central Ancient Mediterranean steppe range: from the western shore of Caspian Sea to north-eastern China.

South European Russia: Dagestan, Rostov Area [Ponomarev *et al.*, 2011; Abdurakhmanov *et al.*, 2012; Ponomarev, Abdurakhmanov, 2014] (materials re-examined by A.V. Ponomarev); the steppe Cis-Urals: Orenburg Area [present data]; South Siberia: the Altai, Tuva, Buryatia [Danilov, 2008; Marusik, Logunov, 1995: sub *D. lesserti*, 2009]; Mongolia [Loksa, 1965: sub *D. lesserti*], north-eastern China [Song *et al.*, 2004].

Drassyllus sur Tuneva et Esyunin, 2003
Figs 11–13, 19.

Drassyllus sur Tuneva, Esyunin, 2003a: 223, figs 1–4 (♂♀).

Drassyllus sur: Kovblyuk *et al.*, 2009: 177, figs 27–28 (♂).

Drassyllus sur: Chatzaki, Russell-Smith, 2017: 244, figs 17, 21–22, 24 (♂♀).

MATERIAL. **Russia**, **Orenburg Area**: 1 ♀ (PSU-3755), Sol-Iletsk Distr., Novoiletsk Vil., 5–15.VI.2003, TTK; 4 ♂♂, 7 ♀♀ (PSU-7572), Svetlyi Distr., 'Ashchisayskaya Steppe' division of Orenburg Reserve (50°57′38″N, 61°12′44″E), various steppes, saline lake shore, VI.2015, SSS; 2 ♂♂, 3 ♀♀ (PSU-7573), same locality, sand drift, stony stepps, saline land, 15–27.VI.2016, ESL; 2 ♂♂, 1 ♀ (MMUE), same locality, multiherbaceous steppe with *Glycyrrhiza*, 16.VI.2016, ESL. **Kazakhstan, South Kazakhstan Area**: 8 ♂♂ (PSU-6112), c. 7 km NE of Terekty Vil., Boralday-Tau Range (42°51.751′N, 69°50.887′E), 11–13.V.2010, TTK.

REMARKS. In the original diagnosis, Tuneva & Esyunin [2003a] assumed that *D. sur* is superficially similar to two North American species: *D. fallens* Chamberlin, 1922 and *D. saphes* Chamberlin, 1936. That assumption is to be corrected, as *D. sur* is extremely close to *D. cyprius* Chatzaki et Russell-Smith, 2017, but the "*embolus of D. cyprius almost straight, projection of embolar radix and terminal apophysis more pointed, median apophysis large and prominent at the ventral side of tegulum, shape of embolar haematodocha different*" [Chatzaki, Russell-Smith, 2017: 244]

and the epigyne with "*wider anterior margin, longer anterior ducts, wider median ducts*" [Chatzaki, Russell-Smith, 2017: 244].

Besides, *D. sur* is similar to several Palaearctic species, such as *D. crimeaensis* Kovblyuk, 2003 (Macedonia, Greece, southern Ukraine, Turkey, the south of European Russia, Azerbaijan [WSC, 2017]), *D. jubatopalpis* Levy, 1998 (Turkey, Israel [Kovblyuk *et al.*, 2009]) and *D. villicoides* (Giltay, 1932) (Greece [Bosmans, 2013]). The male of *D. sur* differs from the last two species in having the straight RTA (Fig. 12) (bent dorsally in both *D. jubatopalpis* [Kovblyuk *et al.*, 2009: fig. 26] and *D. villicoides* [Senglet, 2012: fig. 15]) and from the first species in having the well-marked embolar projection (*eP*, Figs 11, 13) which invisible in *D. crimeaensis* [Kovblyuk, 2003: figs 1, 2, 13; Kovblyuk *et al.*, 2009: fig. 23].

The females of three species, *D. crimeaensis*, *D. jubatopalpis* and *D. sur*, have a well-defined posterior margin of the epigynal middle piece (*MP*, Fig. 19), whereas it is not marked in *D. villicoides* [Senglet, 2012: fig. 17; Bosmans, 2013: fig. 3]. The female of *D. jubatopalpis* is characterized by the curved median epigynal ducts [Levy, 1998: fig. 137] (straight in *D. crimeaensis* and *D. sur*). The last two species can be distinguished by the shape of epigynal middle piece, which is cruciform in *D. crimeaensis* [Kovblyuk, 2003: fig. 3] and drop-shaped in *D. sur* (Fig. 19 and fig. 1 in Tuneva & Esyunin [2003a]).

DISTRIBUTION. Central Ancient Mediterranean steppe range: from the western shore of Caspian Sea and Iran to Central Kazakhstan and the steppe Cis-Urals.

South European Russia: Rostov, Astrakhan, Volgograd and Orenburg Areas [Tuneva, Esyunin, 2003a; Ponomarev & Tsvetkov, 2004; Ponomarev *et al.*, 2008; Ponomarev, Khnykin, 2013]. Kazakhstan: Akmola, Kostanay, South Kazakhstan and Western Kazakhstan Areas [Piterkina, 2009; Gromov, 2011; Ponomarev, Bragina, 2014; present data]. Turkey: Adana Province [Kovblyuk *et al.*, 2009]. Iran: Khorasan-e-Razavi Province [Zamani *et al.*, 2014].

Gnaphosa lucifuga (Walckenaer, 1802)
Figs 23–31.

Gnaphosa lucifuga: Tullgren, 1946: 78, fig. 23A–B, Pl. 12, figs 154–156 (♂♀).

Gnaphosa lucifuga: Grimm, 1985: 60, figs 43, 60–61 (♂♀).

Gnaphosa lucifuga: Ovtsharenko *et al*., 1992: 5, figs 1–6 (♂♀).

Gnaphosa betpaki (nec Ovtsharenko *et al*.): Tuneva, Esyunin, 2003a: 230, fig. 26 (♂, misidentification).

Gnaphosa lucifuga: Kovblyuk, 2005: 134, figs 1–5 (♂♀).

For a complete list of the taxonomic references see WSC [2018].

MATERIAL. **Russia**, **Orenburg Area**: 8 ♂♂, 1 ♀ (PSU-1843), Sol-Iletsk Distr., c. 10 km W of Troitsk Vil., Chybynda (=Shybynda) gully (50°40′52″N, 54°27′28″E), chalk declivity, dry riverbed, V.2000 & VIII.2001, ESL & FGS; 2 ♀♀ (PSU-1850), same locality, saline land, 14–23.VIII.2001, ESL & FGS; 2 ♂♂ (PSU-3743), same locality, dry riverbed and windbreak, 7–14.VI.2003, TTK; 1 ♀ (PSU-4997), same locality, chalk slope, 9.VI.2000, ESL; 1 ♂ (PSU-7271), same locality, steppe with *Stipa*, 5–13.VI.2000, ESL; 2 ♀♀ (PSU-2672), Svetliy Distr., feather grass (*Stipa*) and wormwood (*Artemisia*) steppes, VI and VII.2009, TTK; 6 ♂♂, 2 ♀♀ (PSU-4273), Orenburg Distr., 3 km NE Pervomajskij Vil., Donguzskaya Steppe (51°33′14″N 55°01′37″E), feather grass (*Stipa*) steppe, 20.V–4.VI.2007, KVO; 1 ♂, 1 ♀ (ZMMU), same locality, feather grass (*Stipa*) steppe, 9.IV–3.V.2008, KVO; 1 ♂ (PSU-6558), Orenburg Distr., c. 3 km NE of Nezhinka Vil. (51° 47′21″N, 55°22′45″E), steppe, 25.V–11.VI.2008, KVO; 1 ♂ (PSU-6566), Orenburg Distr., c. 15 km NE of Orenburg, Grebeni Mt. (51°56′29″N, 55°16′48″E), steppe, 21.V–27.VI.2009, KVO; 3 ♂♂, 1 ♀ (MMUE), same locality, steppe, 7.V–12.VI.2008, KVO; 2 ♂♂, 2 ♀♀ (MMUE), Svetlyi Distr., 'Ashchisayskaya Steppe' division of Orenburg Reserve (50°57′38″N, 61°12′44″E), steppe, VI.2015, SSS; 3 ♂♂ (PSU-7574), same locality, steppe, 3–7.V.2015, ESL & Dedyukhin S.V.; 7 ♂♂, 4 ♀♀ (PSU-7575), same locality, various steppes, VI.2015, SSS; 5 ♂♂, 1 ♀ (PSU-7576), same locality, saline land, 27.VI.2017, ESL; 1 ♂ (PSU-8264), Belyaevka Distr., 'Burtinskaya Steppe' division of Orenburg Reserve (51°22′N, 55°59′E), steppe, VIII.2016, V.A. Nemkov.

COMPARATIVE MATERIAL. *Gnaphosa betpaki* Ovtsharenko, Platnick et Song, 1992: 1 ♀ (PSU-5986), Kazakhstan, Chimkent (=South Kazakhstan) Area, c. 40 km E of Koksaray Vil., desert (42°27.837′N, 67°41.292′E), 2.V.2010, TTK.

REMARKS. This large and widespread species has been redescribed and illustrated many times. The specimens from Orenburg have minor differences in the conformation of the male palp and epigyne (Figs 25–31). Male palp (Fig. 23): the number of embolic tubercles varies considerably as well as their shapes (Figs 25–29). The male from Western Kazakhstan, of which a SEM photograph is shown by Ovtsharenko *et al.* [1992: fig. 5], have the right conical embolic tubercles. Epigyne (Figs 30, 31): the epigynal hood with large or small number of pleats, as well as with a triangular/arcuate impression at the posterior margin. In Ovtsharenko's SEM photograph [Ovtsharenko *et al.*, 1992: fig. 6], the epigynal hood looks more rectangular, with poorly expressed pleats and a posterior impression.

The records *G. betpaki* from Orenburg Area [Tuneva, Esyunin, 2003a] turned out to be a misidentification, and should actually be referred to *G. lucifuga* (the museum specimens, no. PSU-1843, PSU-1850, PSU-2672, have been reexamined). Therefore, we have excluded *G. betpaki* from the current list of Ural spiders. *G. betpaki* is distributed in South Kazakhstan, Zhambyl and Kzyl-Orda Areas of Kazakhstan only [Ovtsharenko *et al.*, 1992].

DISTRIBUTION. West-Central-Palaearctic subboreal range: from Iberian Peninsula to Xinjiang, northward to South Sweden in Europe and to southern West Siberian in Asia, southward to the Mediterranean, Azerbaijan and Uzbekistan.

Gnaphosa pilosa Saveljeva, 1972
Figs 32–37.

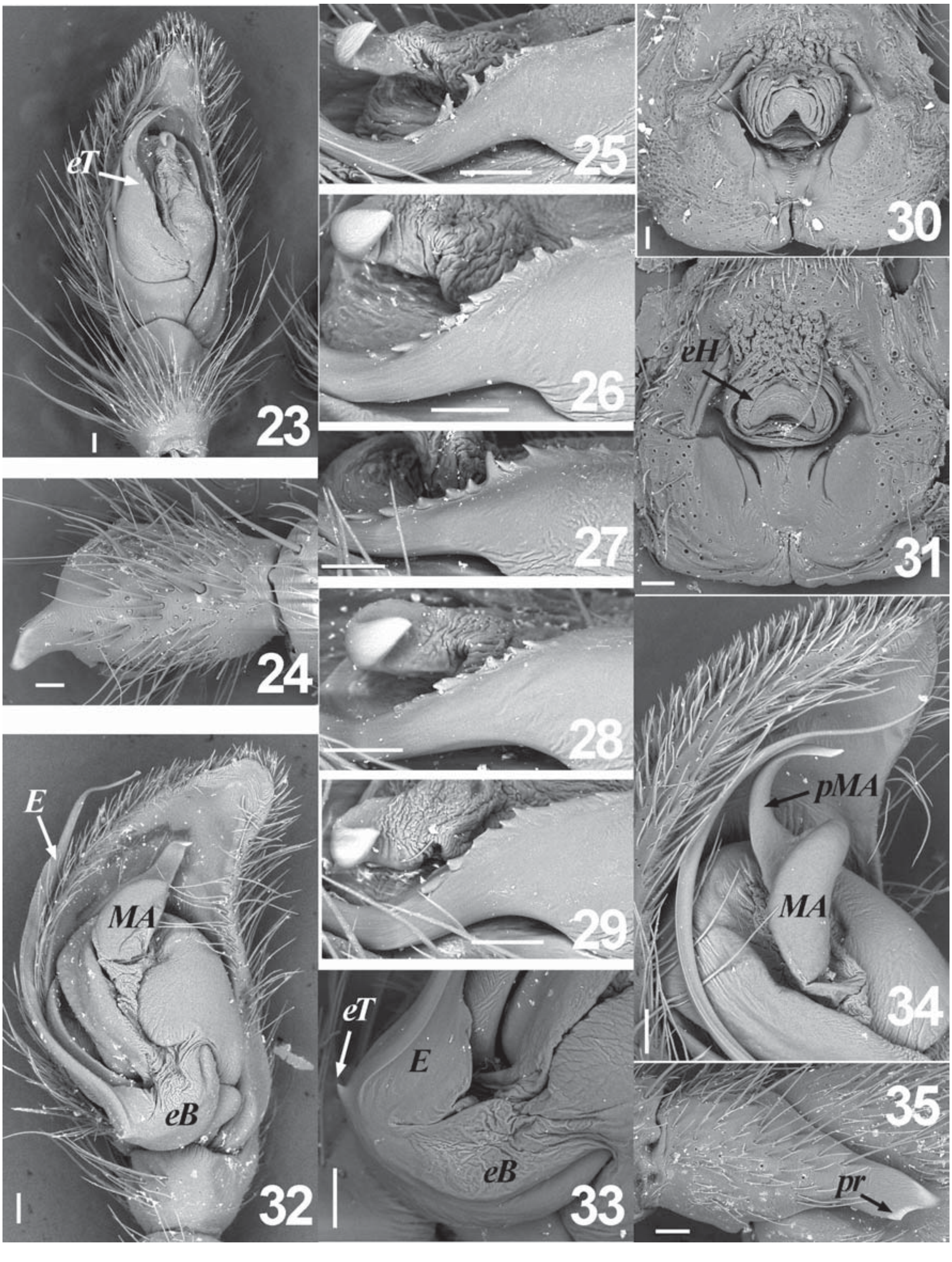
Gnaphosa pilosa Savelyeva, 1972: 1240, figs 3–4 (♀).

Gnaphosa pilosa: Ovtsharenko *et al.*, 1992: 24, figs 75–78 (♂♀).

MATERIAL. **Russia**, **Orenburg Area**: 10 ♂♂, 2 ♀♀ (PSU-7577), 6 ♂♂, 1 ♀ (MMUE), 8 ♂♂, 1 ♀ (ISEA), 14 ♂♂, 1 ♀ (ZMMU), Svetlyi Distr., 'Ashchisayskaya Steppe' division of Orenburg Reserve (50°57′38″N, 61°12′44″E), various steppes, VI.2015, SSS. **Kazakhstan, East Kazakhstan Area**: 1 ♀ (PSU-3231), nr. Zaisan Lake, 2200 m a.s.l., under stone, VII.1936, D.E. Kharitonov.

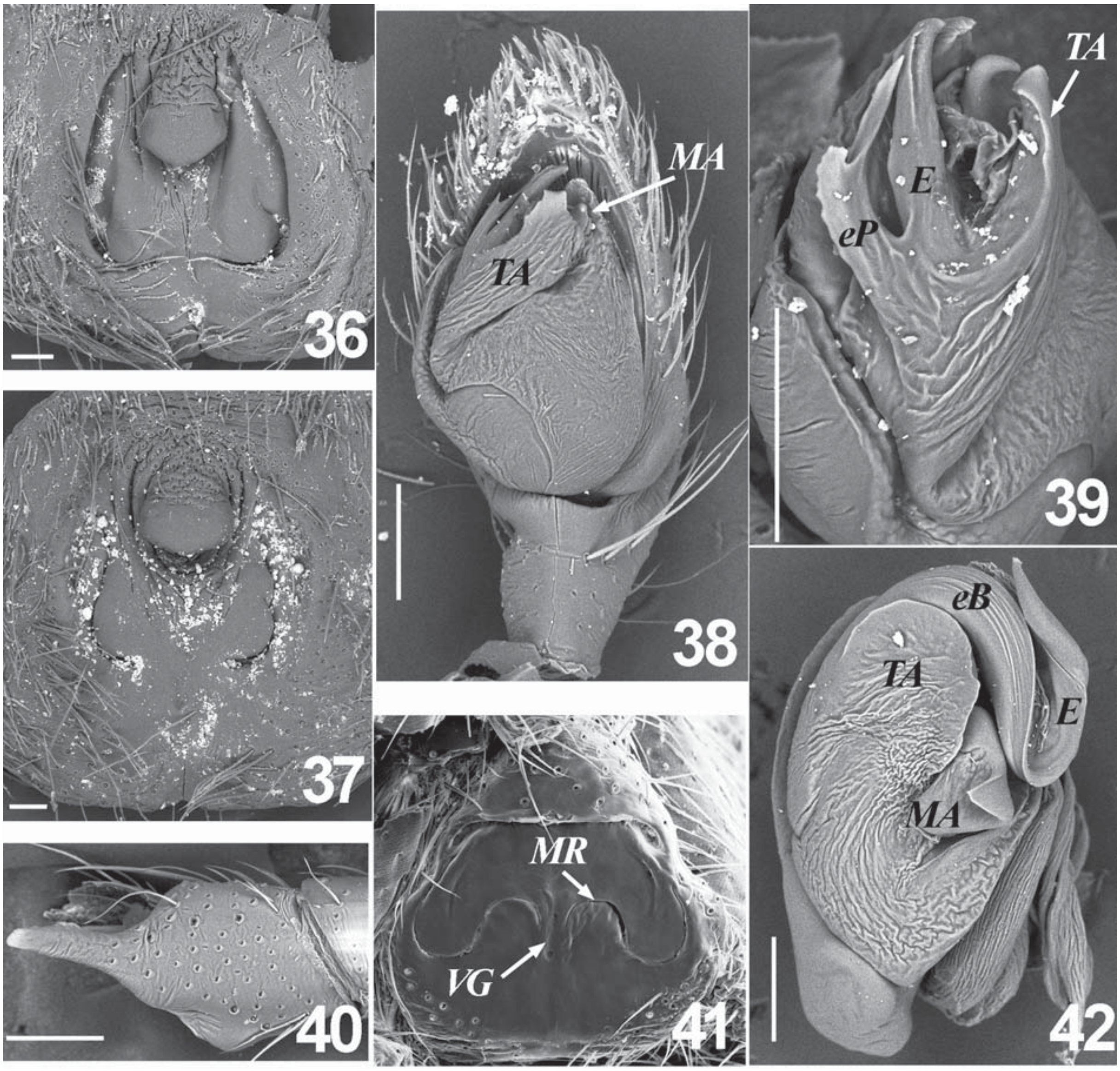
REMARKS. The conformation of the male palps in the studied specimens slightly differs from the illustrations given by Ovtsharenko *et al.* [1992: fig. 75, 76], who noticed that the RTA of their specimens was bifid. Our males have a triangular protrusion near the RTA apex (*pr*, Fig. 35). Other characters in both sexes correspond to the species description. Yet, the studied female from East Kazakhstan is identical to those from the Cis-Ural steppe.

G. pilosa is close to the following species of the *lugubris* group: viz., *G. caucasica* Ovtsharenko, Platnick et Song, 1992, *G. lapponica* (L. Koch, 1866) and *G. pseashcho* Ovtsharenko, Platnick et Song, 1992. The males of *G. pilosa*



Figs 23–35. *Gnaphosa lucifuga* (Walckenaer, 1802) (23–31) and *G. pilosa* Saveljeva, 1972 (32–35), scanning electron micrographs: 23, 32 — male palp, ventral view, 24, 35 — tibia of male palp, lateral view, 25–29 — embolic tubercles, 30, 31 — epigyne, ventral view, 33 — embolic base and basal part of embolus, 34 — medial apophysis of male palp, lateral view. Abbreviations: *E* — embolus; *eB* — embolus base; *eH* — epigynal hood; *eT* — embolic tubercles; *MA* — median apophysis; *pMA* — process of MA; *pr* — triangular protrusion of retrolateral tibial apophysis. Scale bars: 0.1 mm.

Рис. 23–35. *Gnaphosa lucifuga* (Walckenaer, 1802) (23–31) и *G. pilosa* Saveljeva, 1972 (32–35), сканирующие электронные микрофотографии: 23, 32 — пальпа, снизу; 24, 35 — голень пальпа самца, сбоку; 25–29 — зубчики эмболюса; 30, 31 — эпигина, снизу; 33 — база эмболюса и его основание, 34 — срединный отросток пальпа самца, сбоку. Сокращения: *E* — эмболюс; *eB* — основание эмболюса; *eH* — «колпачок» эпигины; *eT* — зубчики эмболюса; *MA* — срединный отросток; *pMA* — вырост MA; *pr* — треугольный выступ ретролатерального отростка голени. Масштаб: 0,1 мм.



Figs 36–42. *Gnaphosa pilosa* Savelyeva, 1972 (36–37), *Urozelotes trifidus* Tuneva, 2003 (38–40) and *Trachyzelotes manytchensis* Ponomarev et Tsvetkov, 2006 (41–42), scanning electron micrographs: 36, 37, 41 — epigyne, ventral view; 38 — male palp, ventral view; 39 — embolic division; 40 — tibia of male palp, lateral view; 42 — bulbus, ventral view. Abbreviations: *E* — embolus; *eB* — embolic base; *eP* — embolic projection; *MA* — median apophysis; *MR* — median ridge of epigyne; *TA* — terminal apophysis, *VG* — V-shaped groove of epigyne. Scale bars: 0.1 mm.

Рис. 36–42. *Gnaphosa pilosa* Saveljeva, 1972 (36–37), *Urozelotes trifidus* Tuneva, 2003 (38–40) and *Trachyzelotes manytchensis* Ponomarev et Tsvetkov, 2006 (41–42), сканирующие электронные микрофотографии: 36, 37, 41 — эпигина, снизу; 38 — пальпа самца, снизу; 39 — эмболюсный отдел; 40 — голень пальпа самца, сбоку; 42 — бульбус, снизу. Сокращения: *E* — эмболюс; *eB* — основание эмболюса; *eP* — отросток эмболюса; *MA* — срединный отросток; *MR* — срединный гребень эпигины; *TA* — терминальный отросток, *VG* — V-образная борозда эпигины. Масштаб: 0,1 мм.

can be distinguished by the curved median apophysis pointed at its tip (*MA*; Fig. 34) and the curved embolus with a single embolic tubercule basally (*eT*; Fig. 33). The females can be separated by an oblong midpiece of the epigyne with straight posterior margin (Figs 36, 37).

DISTRIBUTION. Central-Asian steppe range: species is known from Karaganda and East Kazakhstan Areas of Kazakhstan [Savelyeva, 1972; Ovtsharenko *et al.*, 1992; Tuneva, 2004] and from the border of Aktyubinsk and Orenburg Areas [present data], as well as from the Altai [Azarkina, Trilikauskas, 2013].

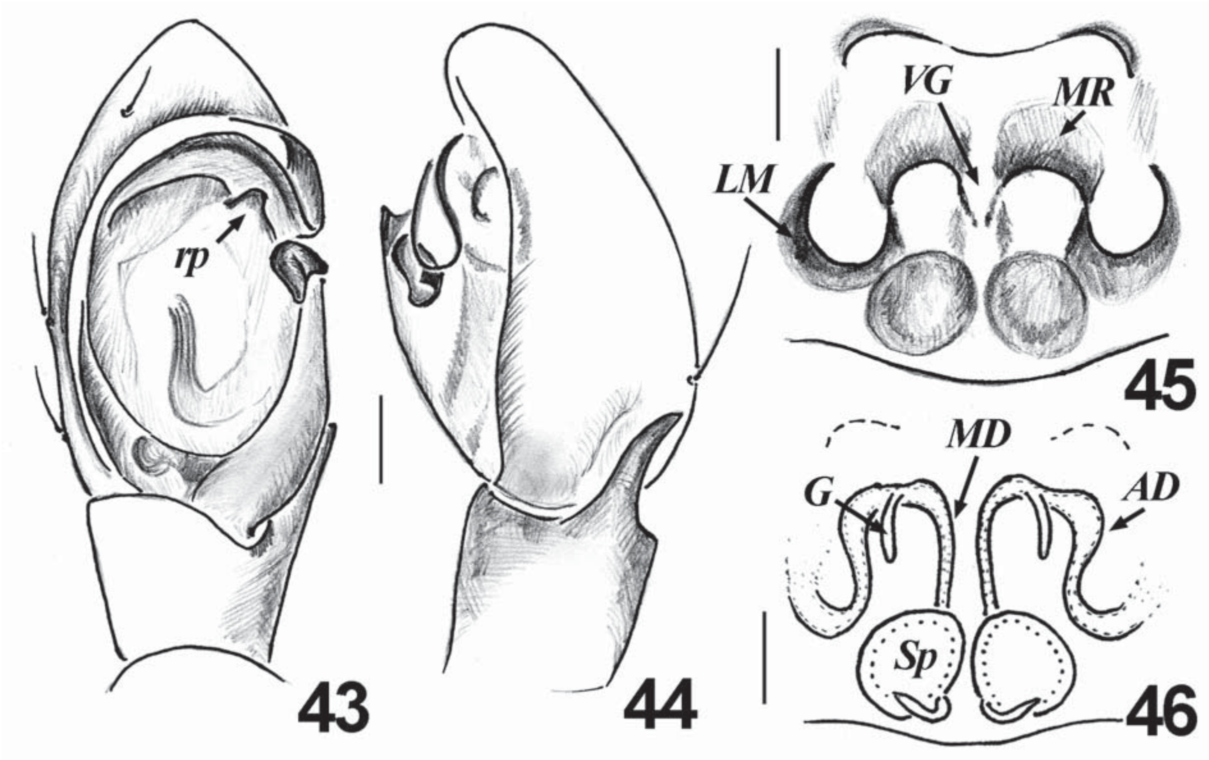
Trachyzelotes manytchensis Ponomarev et Tsvetkov, 2006 Figs 22, 41–46.

Trachyzelotes sp.: Ponomarev, Tsvetkov, 2004: 95, fig. 2.13–14 (♂♀).

Trachyzelotes manytchensis Ponomarev, Tsvetkov, 2006: 11, figs 18–19 (♂♀).

Trachyzelotes manytchensis: Ponomarev *et al.*, 2016: 10, figs 5–8 (♂♀).

MATERIAL. Russia, **Orenburg Area**: 3 ♂♂, 4 ♀♀ (PSU-7977), Svetlyi Distr., 'Ashchisayskaya Steppe' division of Oren-



Figs 43–46. *Trachyzelotes manytchensis* Ponomarev et Tsvetkov, 2006: 43, 44 — male palp, ventral and lateral view; 45, 46 — epigyne, ventral and dorsal view. Abbreviations: *AD* — anterior epigynal duct; *G* — spermathecal gland; *LM* — lateral epigynal margin; *MD* — median epigynal duct; *MR* — median ridge of epigyne; *rp* — retrolateral process of terminal apophysis, *Sp* — spermathecae; *VG* — V-shaped groove of epigyne. Scale bars: 0.1 mm.

Рис. 43-46. *Trachyzelotes manytchensis* Ponomarev et Tsvetkov, 2006: 43, 44 — пальпа, снизу и сбоку; 45, 46 — эпигина, снизу и сбоку. Сокращения: *AD* — передние каналы эндогины; *G* — железа сперматеки; *LM* — боковой край эпигины; *MD* — срединный канал эндогины; *MR* — срединный гребень эпигины; *rp* — ретролатеральный вырост терминального отростка, *Sp* — сперматека; *VG* — V-образная борозда эпигины. Масштаб: 0,1 мм.

burg Reserve (50°57′38″N, 61°12′44″E), various steppes, 4.VI–5.VII.2015, SSS; 1 ♀ (PSU-8267), Belyaevka Distr., 'Burtinskaya Steppe' division of Orenburg Reserve (51°22′N, 55°59′E), steppe, VIII.2016, V.A. Nemkov.

REMARKS. *T. manytchensis* was originally described from Rostov Area of Russia [Ponomarev, Tsvetkov, 2006]. Based on the examination of the male and two females of *T. manytchensis* from Kohgiluyeh and Boyer-Ahmad Provinces of Iran, Senglet [2011: 530] concluded that their "*genitalia show a close relationship with the Zelotes tenuis species group*" and established a new combination – *Zelotes manytchensis* [Senglet, 2011: 527]. Recently, Ponomarev *et al.*, [2016] restored the original combination and also suspected that "*perhaps Senglet dealt with another species close to T. manytchensis*" [Ponomarev *et al*., 2016: 11]. We had an opportunity to examine a female from Iran. Its epigyne is consistent with the pictures presented by Senglet [2011: figs 63, 64, 77] for the Iranian females. Thus, we are convinced that the Iranian species reported by Senglet [2011] under the name of *Zelotes manytchensis* is a separate, undescribed *Zelotes* species.

True *T. manytchensis* belongs to the *barbatus* species group [*sensu* Platnick & Murphy, 1984] reasoning from the following group's diagnostic characters: the distally rounded terminal apophysis (*TA*) and embolar base (*eB*; Fig. 42), and the anterior-laterally expanded anterior epigynal ducts (*AD*; Fig. 46).

By the position and shape of the retrolateral process of the terminal apophysis (*rp*, Fig. 43), the males of *T. manytchensis* are most similar to those of *T. bardiae* (Caporiacco, 1928) (Portugal, Spain, Algeria, Libya [Levy, 1998]) and *T. glossus* (Strand, 1915) (Israel, Turkey [WSC, 2017]). *T. manytchensis* can be distinguished from *T. glossus* by the longer RTA which is approximately equal to the length of the palpal tibia [Ponomarev *et al.*, 2016: fig. 8] (RTA is shorter, equal to about a half of the length of the palpal tibia in *T. glossus* [Levy, 1998: fig. 30]). *T. manytchensis* can be separated from *T. bardiae* by the shorter loop of embolus (in lateral view) that does not reach the middle part of the cymbium (Fig. 44) (the loop of embolus reaches the middle part of the cymbium in *T. bardiae* [Platnick, Murphy, 1984: fig. 44]).

By the conformation of the epigyne, the females of *T. manytchensis* are most similar to those of *T. bardie* [*sensu* Levy, 1998] known from Spain, Morocco, Algeria, Israel, *T. mutabilis* (Simon, 1878) (Mediterranean [WSC, 2017]) and *T. ravidus* (L. Koch, 1875) (Ethiopia [Platnick, Murphy, 1984]). *T. manytchensis* differs from the related species in having the S-shaped anterior epigynal ducts of endogyne (*AD*, Fig. 22, 46) (anterior epigynal ducts arcuately rounded in *T. bardie* [Levy, 1998: fig. 32], *T. mutabilis* and *T. ravidus* [Platnick, Murphy, 1984: figs 18, 42]).

It is worth noticing a similarity between the females of *T. manytchensis* and *T. ansimensis* Seo, 2002 (the male is unknown [Seo, 2002]) described from South Korea. Both species are characterized by the median epigynal margin extending backward and forming a narrow V-shaped groove (*VG*, Figs 41, 45), the S-shaped anterior epigynal ducts of endogyne, and identical somatic morphology. It is likely that both species names are synonymous, as, for instance, was recently established for *Ermetus inopinabilis* Ponomarev, 2008 and *E. koreana* (Paik, 1967) [Lissner, 2018].

DISTRIBUTION. The steppe zone of Russia, from Rostov Area [Ponomarev, Tsvetkov, 2004, 2006; Ponomarev *et al.*, 2016] to Orenburg Area [present data].

Urozelotes trifidus Tuneva, 2003
Figs 21, 38–40.

Urozelotes trifidus Tuneva, 2003: 95, figs 1–6 (♂♀).

Urozelotes trifidus: Milano *et al.*, 2019 : 37, fig. 5 (♂♀).

MATERIAL. **Russia**, **Orenburg Area**: 11 ♂♂, 4 ♀♀ (PSU-7604), Svetlyi Distr., 'Ashchisayskaya Steppe' division of Orenburg Reserve (50°57′38″N, 61°12′44″E), saline land, shore of a saline lake, VI.2015, SSS; 3 ♂♂, 5 ♀♀ (ZMMU), same locality and habitat, 7.V.2015, ESL; 10 ♂♂, 5 ♀♀ (MMUE), same locality, sand drift, saline sandy shore of a steppe lake, bed of ephemeral impounded body, VI.2016, ESL; 3 ♂♂, 5 ♀♀ (ISEA), same locality and habitat, 26.VI.2017, ESL.

REMARKS. All four species of the genus *Urozelotes* Mello-Leitão, 1938 have peculiar properties in the structure of the embolar division, except for *U patulus* Sankaran et Sebastian, 2018 from Western Ghats of India which seems not to belong to this genus. *U. trifidus* is characterized by the embolar projection bifurcated at its apex (*eP*; Fig. 39) and the tabulate terminal apophysis with a serrated anterior margin (*TA*; Fig. 38). By the shape of the epigynal fovea and the structure of the endogyne, the females of *U. trifidus* are very similar to those of *U. kabenge* FitzPatrick, 2005 from Zambia, but can be distinguished by the presence of a median ridge on the epigynal plate, which is absent from the latter species [FitzPatrick, 2005: fig. 10].

DISTRIBUTION. To date, the species is known from three distant regions only: south-eastern France (riparian habitats, 1146 m a.s.l. [Milano *et al.*, 2019]), the Cis-Ural steppe zone (riparian habitats) [present data] and Novosibirsk Area in West Siberia [Azarkina *et al.*, 2018].

"Zelotes" rufi Efimik, 1997
Figs 20, 47–49.

Zelotes rufi Efimik in Esyunin, Efimik, 1997: 107, figs 17–18 (♀).

"Zelotes" fallax Tuneva et Esyunin, 2003a: 225, figs 10–14 (♂) **Syn.n.**

MATERIAL. **Russia**, **Orenburg Area**: 1 ♂ (PSU-1935: paratype of *Z. fallax*), Sol-Iletsk Distr., c. 10 km W of Troitsk Vil., Chybynda (=Shybynda) gully (50°40"52"N, 54°27"28"E), chalk slope, 5–12.VI.2000, ESL & FGS; 4 ♂♂, 1 ♀ (PSU-7608), Svetlyi Distr., 'Ashchisayskaya Steppe' division of Orenburg Reserve (50°57′38″N, 61°12′44″E), rubbly steppe, 15–16.VI.2016, 25.VI. 2017, ESL; 2 ♂♂ (MMUE), same locality, *Artemisia* steppe, 16. VI.2016, ESL; 2 ♂♂ (PSU-7609), same locality, *Artemisia* steppe on white land, 25–26.VI.2017, ESL; 1 ♀ (PSU-7610), same locality, worm-wood (*Artemisia*) steppe, 27.VI.2017, ESL. **Kazakhstan, Karaganda Area**: 2 ♂♂ (ISEA), c. 6 km S of Barshin (=Barshino) Vil., saline land along Saryzhol Lake (49°37′N, 69°28′E), pitfall-traps, 2–7.VI.2018, I.I. Lyubechanskii & G.N. Azarkina.

REMARKS. *Z. rufi* was described from the holotype female collected from steppe meadows in Meleuz District of Bashkortostan [Esyunin, Efimik, 1997]. Later, *Z. fallax* was described from two males collected from chalk cliffs in Sol-Iletsk District of Orenburg Area [Tuneva, Esyunin, 2003a].

The material collected from "Ashchisayskaya steppe" contains the males of *Z. fallax* and a single female of *Z. rufi*. No other (unknown) *Zelotes* species have been found in this locality for three years of the research. Moreover, the specimens of *Z. fallax* and *Z. rufi* do not differ in somatic characters, and in two samples both sexes were collected from the same biotope. Thus, we have come to the conclusion that *Z. fallax* is to be considered a junior synonym of *Z. rufi*. The systematic position of *Z. rufi*, viz. its correct generic assignment, remains unclear.

DISTRIBUTION. The steppe regions of South Urals and Cis-Urals: Bashkortostan Republic [Esyunin, Efimik, 1996], Orenburg Area [Tuneva, Esyunin, 2003a] and Central Kazakhstan [present data].

New faunistic records

Gnaphosa mandschurica Schenkel, 1963

MATERIAL. **Russia, Orenburg Area**: 1 ♂ (PSU-7978), Svetlyi Distr., 'Ashchisayskaya Steppe' division of Orenburg Reserve (50°57′38″N, 61°12′44″E), shore of a saline lake, 14–25.VI.2015, SSS; 1 ♀ (PSU-8266), Belyaevka Distr., 'Burtinskaya Steppe' division of Orenburg Reserve (51°22′N, 55°59′E), steppe, VIII.2016, V.A. Nemkov.

DISTRIBUTION. Central Asian steppe range, with isolated populations down the Siberian riversides: from the Cis-Urals steppe and Akmola Area [Gromov, 2011; Marusik, Omelko, 2014; present data] to eastern Mongolia and central China [Ovtsharenko *et al.*, 1992; Song *et al.*, 1999; Marusik, Logunov, 1999, 2006], southward to Nepal [Ovtsharenko *et al.*, 1992], northward to South Siberia (the Altai, Tuva, Buryatia, Khakassia, Transbaikalia) [Ovtsharenko *et al.*, 1992; Marusik, Logunov, 1995: as *G. glandifera*, 2009; Logunov *et al.*, 1998; Marusik *et al.*, 2000; Danilov, 2008; Azarkina, Trilikauskas, 2013; Fomichev, 2015], with northern isolated populations in Tobolsk (West Siberia) [Esyunin, Stepina, 2014] and central Yakutia [Marusik *et al.*, 1993].

Haplodrassus bohemicus Miller et Buchar, 1977

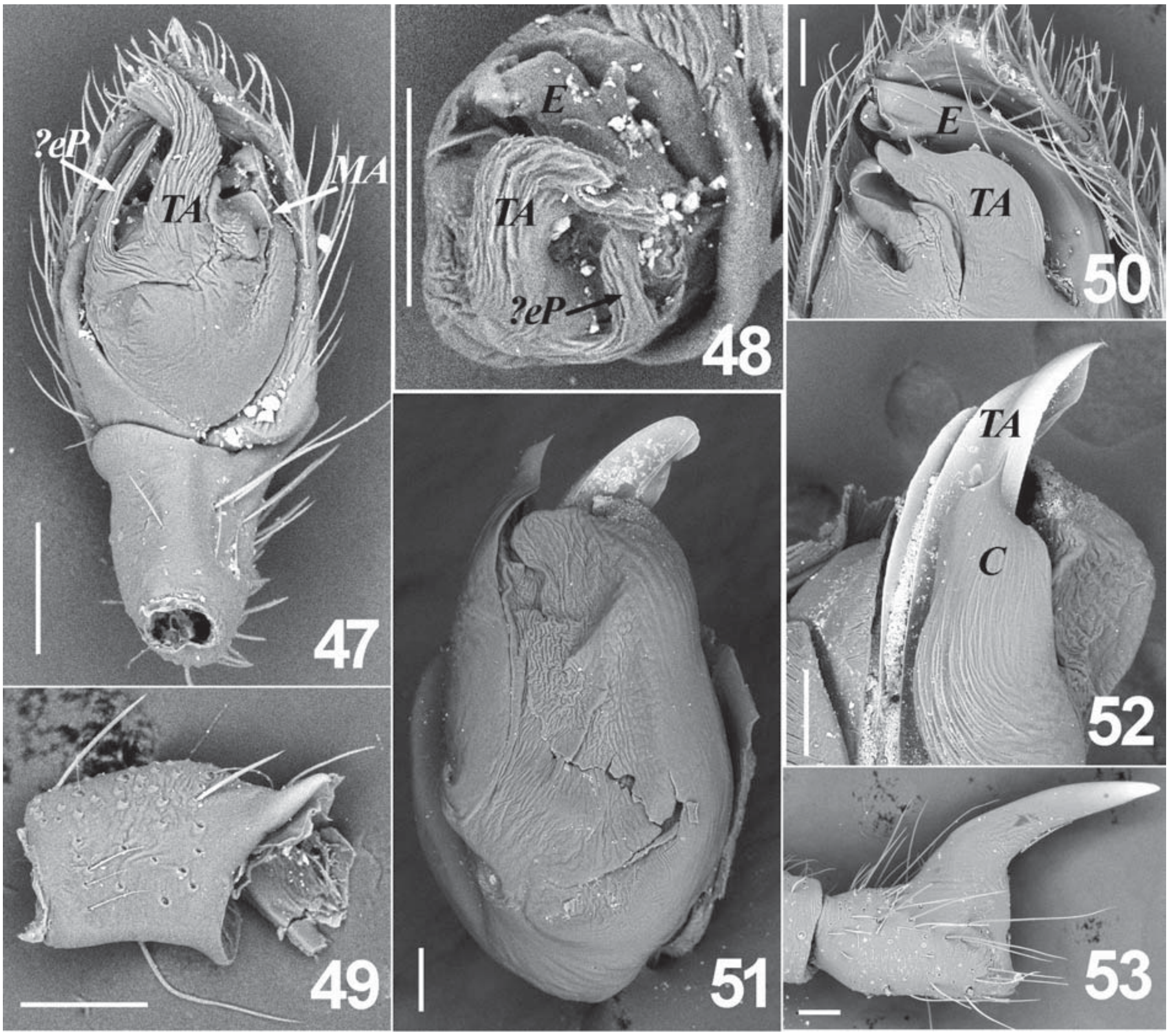
MATERIAL. **Russia, Orenburg Area**: 1 ♀ (PSU-7578), Svetlyi Distr., 'Ashchisayskaya Steppe' division of Orenburg Reserve, 50°57′38″N, 61°12′44″E, saline land, 14–23.VI.2015, SSS.

DISTRIBUTION. West-Palaearctic steppe range: from Greece, Macedonia and Czech Republic throughout the steppe zone of Russian Plain [Kovblyuk *et al.*, 2012; Ponomarev, Lebedeva, 2014] to the steppe Cis-Urals [present data].

Haplodrassus orientalis (L. Koch, 1866)
Fig. 50.

MATERIAL. **Russia, Orenburg Area**: 12 ♂♂, 10 ♀♀ (PSU-7580), 10 ♂♂, 10 ♀♀ (ZMMSU), 5 ♂♂, 5 ♀♀ (MMUE), Orenburg Distr., c. 3 km NE of Pervomajskij Vil., Donguzskaya Steppe (51°33′14″N, 55°01′37″E), steppe, 3.X.2007–9.IV.2008, KVO; 24 ♂♂, 29 ♀♀ (PSU-7657), same locality and habitat, IX.2008–IV.2009, KVO; 2 ♂♂ (PSU-7603), 1 ♂ (MMUE), Svetlyi Distr., 'Ashchisayskaya Steppe' division of Orenburg Reserve (50°57′ 38″N, 61°12′44″E), pond shore mesophytic vegetation, 21–27.IX. 2015, SSS.

DISTRIBUTION. West-Palaearctic steppe range: Greece [Van Keer *et al.*, 2010: sub *H. isaevi*; Bosmans *et al.*, 2018],



Figs 47–53. *Zelotes rufi* Efimik, 1997 (47–49), *Haplodrassus orientalis* (L. Koch, 1866) (50) and *Parasyrisca arrabonica* Szinetár et Eichardt, 2009 (51–53), scanning electron micrographs: 47 — male palp, ventral view; 48 — embolic division, apical view; 49, 53 — tibia of male palp, lateral and dorsal view, respectively; 50, 52 — apical part of bulbus, ventral and lateral view, respectively; 51 — bulbus, ventral view. Abbreviations: *C* — conductor of male palp; *E* — embolus; ?*eP* — projection of ?embolic base; *MA* — median apophysis; *TA* — terminal apophysis. Scale bars: 0.1 mm.

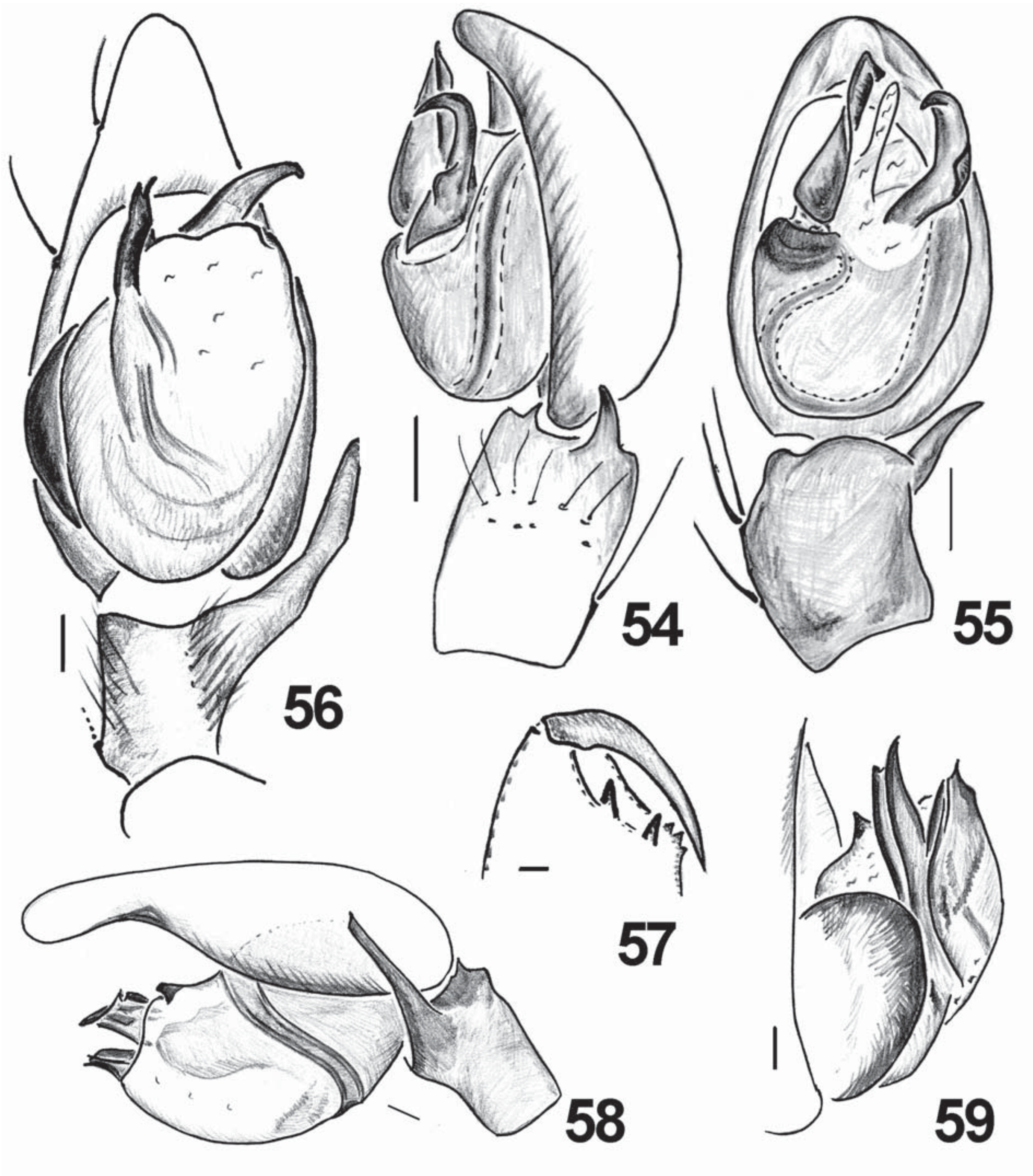
Рис. 47–53. *Zelotes rufi* Efimik, 1997 (47–49), *Haplodrassus orientalis* (L. Koch, 1866) (50) и *Parasyrisca arrabonica* Szinetбг et Eichardt, 2009 (51–53), сканирующие электронные микрофотографии: 47 — пальпа, снизу; 48 — эмболюсный отдел, спереди; 49, 53 — голень пальпа самца, соответственно, сбоку и сверху; 50, 52 — верхняя часть бульбуса, соответственно, снизу и сбоку; 51 — бульбус, снизу. Сокращения: *C* — кондуктор; *E* — эмболюс; ?*eP* — отросток ?основания эмболюса; *MA* — срединный отросток; *TA* — терминальный отросток. Масштаб: 0,1 мм.

the Crimea [Kovblyuk *et al.*, 2012: sub *H. isaevi*], south regions of Russian Plain (Rostov and Volgograd Areas) [Ponomarev, Tsvetkov 2006; Kovblyuk *et al.*, 2012; Ponomarev, Khnykin, 2013: all sub *H. isaevi*], West Kazakhstan and Kostanay Areas of Kazakhstan [Piterkina, Ovtsharenko 2007; Ponomarev, Bragina, 2014: all sub *H. isaevi*], the steppe Cis-Urals [present data].

Micaria bosmansi Kovblyuk et Nadolny, 2008

MATERIAL. **Russia, Orenburg Area**: 2 ♀♀ (PSU-7600), Svetlyi Distr., 'Ashchisayskaya Steppe' division of Orenburg Reserve (50°57′38″N, 61°12′44″E), steppe, 3–5.V.2015, S.V. Dedyukhin; 1 ♀ (MMUE), same locality, pond shore mesophytic vegetation, 1–8.VII.2015, SSS; 1 ♂, 1 ♀ (PSU-7601), same locality, sand drift near steppe pond, 26.VI.2017, ESL.

DISTRIBUTION. West Palaearctic steppe range: from eastern Ukraine, the Crimea and Turkey [Kovblyuk, Nadolny, 2008; Polchaninova, Prokopenko, 2015; Demir *et al.*, 2015], throughout south regions of Russian Plain (Volgograd and Rostov Areas) [Ponomarev, Dvadnenko, 2012; Ponomarev, Khnykina, 2013] to the steppe trans-Urals [present data].



Figs 54–59. *Talanites mikhailovi* Platnick et Ovtsharenko, 1991 (54–55) and *Parasyrisca arrabonica* Szinetár et Eichardt, 2009 (56–59): 54–57 — male palp, ventral and lateral view; 58 — tip of chelicerae, backside; 59 — bulbus of male palp, prolateral view. Scale bars: 0.1 mm.

Рис. 54–59. *Talanites mikhailovi* Platnick et Ovtsharenko, 1991 (54–55) и *Parasyrisca arrabonica* Szinetбr et Eichardt, 2009 (56–59): 54–57 — пальпа, снизу и сбоку; 58 — вершина хелицеры, изнутри; 59 — бульбус, сбоку и спереди. Масштаб: 0,1 мм.

Parasyrisca arrabonica Szinetár et Eichardt, 2009 Figs 51–53, 56–59.

MATERIAL. **Russia, Orenburg Area**: 1 ♂ (PSU-7602), Svetlyi Distr., 'Ashchisayskaya Steppe' division of Orenburg Reserve (50°57′38″N, 61°12′44″E), saline land, 21–27.IX.2015, SSS.

REMARKS. The species is described from Hungary, where it inhabitants "*the calciferous open sand steppes (coenologic name Festucetum vaginatae danubiale)*" [Szinetár *et al.*, 2009: 204]. *P. arrabonica* belongs to the *guseripli* species group [Fomichev *et al.*, 2018] containing four species. This group has a West-Palaearctic distribution, extend-

ing from eastern Europe to western China along the steppe zone [Fomichev *et al.*, 2018: map 2].

DISTRIBUTION. West Palaearctic steppe range: from East Europe (Hungary) to the steppe Cis-Urals.

Talanites mikhailovi Platnick et Ovtsharenko, 1991
Figs 54–55.

MATERIAL. **Russia, Orenburg Area**: 2 ♂♂ (PSU-4309), Orenburg Distr., c. 3 km NE of Pervomajskij Vil., Donguzskaya Steppe (51°33′14″N, 55°01′37″E), steppe, 20.V–4.VI.2007, KVO. **Kazakhstan, East-Kazakhstan Area**: 1 ♂ (ISEA), Tarbagatai Mts, north-western Manrak Mt. Range, Tayzhuzgen River, 6.IX. 1997, R. Dudko, ZVK.

DISTRIBUTION. Kazakhstan steppe range: northern Kazakhstan [Platnick, Ovtsharenko, 1991; Gromov, 2011; Ponomarev, Bragina, 2014; present data] and the steppe Cis-Urals [present data].

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